THE TIMES
Higher Education
SUPPLEMENT

Venables' national plan backed by OU senate

by Frances Gibb

A national programme of adult education, along the lines proposed in the Venables report published last December, received overwhelming support at a meeting of the Open University senate this week.

Some 300 members agreed a resolution that the university should adopt in principle a commitment to a programme of continuing education on the scale envisaged in the Venables report.

It adds that such acceptance is "on the understanding that this would not detract from present and planned undergraduate provision and provided that the details of implementation . . . are found to be satisfactory".

The endorsement by the Open University is considered to be a major step in its development, and marks its embarkation on the second part of its charter, to "promote the educational well-being of the community generally".

Sir Walter Perry, the Open University's vice-chancellor, told *The TIMES* this week: I see this as the first significant step down an important new road for the Open University." He said that a full statement on the proposal would be prepared for the Department of Education and Science and the university would put in a bid for DES funds to cover the new programmes prior to the triennium 1980-1982.

A major proposal is that the Open University sets up a Centre for Continuing Education to develop and manage courses and materials, provide a framework for personal development and research, foster a positive attitude in the university towards continuing education.

A debate is to be set up to consider and formulate university policy on continuing education.

The Venables report was produced by a 13-member committee under Sir Peter Venables, first pro-chancellor of the Open University. It was set up by the university in May 1975 to look at the contribution it could make to continuing education.

The report proposes a national 10-year plan for adult education, involving a total injection of £50m, a National Council for Adult and Continuing Education with the power to allocate funds and recommends that the Open University should mount courses of general adult concern in collaboration with other institutions.

The senate agreed 15 resolutions which broadly covered most of the report's recommendations. The details of how these would be implemented are to be worked out by working groups to be set up shortly.

The amount of money to be allocated to continuing education has yet to be decided, although £20,000 has been set aside as "petty cash" to get the programme started.

Job prospects 'influenced by gender'

by Judith Judd

Sex is more important in determining a university graduate's own prospects than the subject he or she studied, according to a report from the National Union of Students.

In its submission on higher education and student employment to the Department of Employment and the Department of Education and Science, the union also says that 15.3 per cent of polytechnic graduates were still seeking permanent employment in the December of 1976 compared with 6.6 per cent of school leavers. The equivalent figure for universities was 11.1 per cent.

The submission says that the high level of unemployment for applied science women graduates from universities suggests employer discrimination against women.

At the end of 1976 12.1 per cent of women university graduates in applied science were still looking for permanent jobs compared with 6.5 per cent of men. In polytechnics there is a much closer correlation between the course and job destination.

The NUS comments that personnel and welfare were overwhelmingly regarded as women's work whereas financial work such as accountancy was seen as largely the prerogative of men.

The union wants the Government to consider widening the application of decisions by Employment Appeal Tribunals and to ensure that the Sex Discrimination Act is more widely used.

The submission shows that students who have taken Higher National Diplomas are more sought after than either polytechnic or university graduates. Only 9.9 cent of them were still seeking permanent employment at the end of 1976.

In engineering and technology in polytechnics, however, HND students have better job prospects than degree students.

The union reports high levels of graduate unemployment in art and design (21.6 per cent) and in arts (27.5 per cent) in polytechnics. But it says: "The popular notion that science students are more able than artists to gain employment is shown to be a myth. In fact, in 1976, a university arts graduate was more likely to gain permanent employment than a polytechnic science graduate and an HND graduate was more employable than them both".

The submission attacks the universities and polytechnics for over specialization in course provision. It says that in the universities only a minority went into jobs related to their courses and in the polytechnics, though the correlation is closer, there was more unemployment.

Cardiff lecturers call for total appointments reform

Lecturers at University College, Cardiff, have called for a total reform of the college's system of government and in particular of its appointments procedures.

At a meeting last week the Non-Professorial Staff, a local staff association which represents some 500 lecturers, expressed its disappointment at the college's failure to "uphold proper procedures and academic standards within the college".

It called for a reform of the college's appointments procedures, including an end to the system whereby candidates are invited to name their external assessors.

All members of all appointments committees should be shown correspondence between applicants and the college, and also all application forms and curricula vitae before a short list is drawn up, it sid.

It suggested also that members of appointments committees should have the power to determine which references are to be taken up and how many applicants are to be short-listed; that short lists be made on the basis of the votes of all the committee; and that the role of external assessors be clarified so that they are acknowledged to have standing with other members of the appointments committee.

The staff has also called for reform of the college charter for changes in the composition procedures of senate which it have enough financial independence to enable it to make its own recommendations to council.

Furore provoked among lecturers by the report of an inquiry (on July 22) into recent appointments in the college.

The report's findings were accepted by the college council administration as a complete vindication of Dr C. W. Brown, the principal. It concluded that lecturers concerned had been appointed by proper and open procedures.

The inquiry, chaired by Sir Francis was set up following discovery by students of a series of letters which showed that lecturers had been approved by the principal before the closing dates for the jobs appeared.

The Cardiff branch of the Association of University Teachers is holding a meeting this week and will consider a draft report on the report.

MASC to press for new clinical teachers pay scheme

by Clive Cookson
science correspondent

The new Medical Academic Staff Committee (MASC) is to press for National Health Service style negotiating machinery for clinical teachers' pay. At present there is no machinery for negotiating university clinical salaries, just a consultative group that is regarded as inadequate by all parties.

MASC took shape at a conference in Oxford this week, attended by clinical and preclinical teachers from most of Britain's 33 medical schools. It is a union of the Association of University Clinical Academic Staff and the British Medical Association's teachers committee and will operate as a BMA standing committee.

The creation of a University Clinical Negotiating Committee, to operate in parallel with the NHS Joint Negotiating Committee, was adopted as a major policy objective for the new group. The committee would thrash out terms and conditions of service for clinical staff, and these would be put to the existing Review Body on Doctors' and Dentists' Pay, for pricing within an overall brief of maintaining pay parity between NHS and university clinicians.

Some delegates wanted to enlist the Association of University Teachers from the staff side, but they were persuaded that their attitude was unrealistic.

AUT general secretary, Mr Lance Sapper, whose union claims 5,000 members among Britain's 15,000 clinical teachers, says he has an open mind about what set-up would be best and would welcome discussions to sort the matter out.

The first issue any new negotiating committee will have to tackle is the adaptation to universities of the new NHS consultants contract based on "notional half days", which is being discussed between the Department of Health and Social Services and the BMA and due to come into force next April.

NUS want grants inquiry

A call for a working party to look into grants for 16 to 19-year-olds on education and training courses has been made by the National Union of Students.

In a letter to Mrs Williams, the Secretary of State for Education, Miss Sue Slipman, president of the NUS, says: "We wish to see particular emphasis on discussions around the extension of mandatory awards to all courses of further education and the abolition of the parental means test."

The letter deals with the union's proposals for the Government's grants review. The NUS wants the question of mandatory grants for all courses in advanced further education to be dealt with in discussions about the review. The working party would look at non-advanced further education courses.

Miss Slipman repeats the union position, first voiced last year, that the Government should use money from the child tax allowances/child benefit scheme to contribute towards the abolition of the parental means test for grants.

"Our fear is that directly compensating parents for the loss of their children's tax allowance, irrespective of the level of parents' income, will quickly be negated by inflation".

SRC awards £3m for marine study

The Science Research Council has awarded grants totalling £3m under its new marine technology programme. Imperial College, London, gets £1m to investigate fundamental aspects of the design of steel and concrete marine structures.

The other grants, covering two year research programmes, are: Heriot-Watt University £658,000; Glasgow University £567,000, Strathclyde University £396,000; Newcastle University £360,000.

NEXT WEEK

Sir Andrew Huxley answers his critics

Dr Richard Hoggart on the BBC

The future of the postgraduate certificate of education

Staff development in universities

Four pages of sociology books reviews

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High Court judge orders NELP to reopen course

A High Court judge has ordered North East London Polytechnic to reopen a social work training course closed by Dr George Brosan, the director.

The move follows a long-running dispute between the college, the joint education committee of the three London boroughs which maintain it and the Central Council for Education and Training in Social Work over an application to join th ecourse by Mr Suresh Vyas, a practising educating welfare officer employed by Newham, one of the funding authorities.

Mr Vyas was refused admission to the social work programme earlier this year after being interviewed by a special panel which included an inner London Education Authority official. The decision provoked the three funding boroughs to order the complete closure of the course.

But this week, following the High Court decision secured by NELP's students' union, Mr Vyas was allowed to enrol, although this decision was due to be considered again by the college's board.

Dr Brosan, who last month complied with the joint education committee's ruling and told intending students to find another institution of qualification in Social Work courses elsewhere, this week confirmed that enrolments were taking place in line with the High Court ruling. Mr Vyas' position may still be in jeopardy.

The CCETSW has said that Mr Vyas should not be accepted as a candidate, but the course staff have indicated that they will teach him although there is no guarantee that he will receive a certificate.



Dr David Owen viewing the fibres of a mussel after opening a new marine laboratory at the Institute for Marine Environmental Research, Plymouth.

WUS launches 50p collection for Third World scholars

More than 80,000 students will be asked to give 50 pence towards scholarships for Third World refugees this term. The collection is being organized by the World University Service (WUS) and the National Union of Students.

WUS hopes to gather a "modest" amount, £20,000, from the students at 34 colleges, when they collect their student union cards. Academic staff will also be asked to contribute.

The money will be used to help finance a general refugee scholarship fund. At present funds are available only for specific groups of refugees—Chilean, Kurdish and Indo-Chinese, supported by both Government and private contributions.

Support for the collection idea has come from Mrs Williams, the Education Secretary, and Mr Joan Fiddler, United Kingdom representative of the United Nations High Commissioner for Refugees. The WUS scholarship campaign deserves support from every student and academic in the country", Mrs Williams said.

WUS has been campaigning for Government support for a general refugee fund since March, when it submitted detailed proposals. These are still being considered and it is understood that a Cabinet subcommittee is meeting this week to discuss the fund.

The Government has been asked to provide scholarships for 200 refugees who are not covered by special programmes. WUS is hoping for an announcement of Government support soon.

This is the second year of WUS's private campaign for scholarship funds. Last year £6,000 was raised at five colleges and a decision will soon be taken on how this money is to be used.

A system of positive discrimination to benefit poor overseas students could be introduced by the end of the decade, Mrs Shirley Williams, the Education Secretary, said this week.

AUT official's pay

Officials of the Association of University Teachers will not receive their expected salary increases until the university teachers themselves have received their increases.

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Back from the fields to theory

Chinese science on long march back

from David Bonavia
Hongkong

After 11 years of persecution and abuse China's distinguished scientists are again being encouraged to voice their belief in the importance of theoretical research.

The Central Committee of the Chinese Communist Party has issued a circular convening a national conference on science. A number of cities and districts have been given the task of putting scientific research into good shape within the next three months. Scientists who gave up their work as a result of bad treatment by the former "radical" entourage of the late Mao Tse-tung are reported to be returning to their jobs.

A key statement in the campaign to restore scientific research to its pedestal was made recently by Professor Tang Ao-ching, an eminent scientist at the University of Kirin, in Manchuria.

"More people should take up research in applied theory and technology, which play a direct role in pushing forward production. On this basis, we must also devote a portion of manpower to the exclusive study of basic theory." Such a view would have resulted in the disgrace, ostracism and hounding of any Chinese scientist, if expressed before the coup which unseated Mao's entourage last October.

The radicals held that all science must be based on and immediately relevant to the needs and experience of the workers and peasants. This was tantamount to a rejection of theoretical research in all fields except those most closely related to strategic matters such as nuclear missiles. Scientists and academics became disillusioned as a result. Some simply sought other jobs, while some invented illnesses and went into hospitals or sanatoria.

The post-Mao leadership has taken as its banner the late Chou En-lai's call for modernization of science, defence, agriculture and industry by the end of the century. This is proving directly beneficial to the experts who enjoyed prestige and a high standard of living until the Cultural Revolution began in 1966.

While this is stimulating to technological progress in the short run, there still exists the danger, pointed out by Mao, that scientists may form an elite divorced from the mundane needs of the peasants and workers.

Sociologists may censure Prof. Gould

by David Walker

Professor Julius Gould, author of the controversial pamphlet describing Marxist infiltration in higher education, faces the possibility of disciplinary action by his fellow members of the British Sociological Association.

The executive committee of the BSA this week invited Professor Gould to attend a meeting of its professional ethics committee to explain his reference to sociologists in the pamphlet *The Attack on Higher Education*. It is understood the BSA is particularly concerned about the mention of one of its prominent members, Professor Hilary Rose of Bradford University.

Professor Margaret Stacey of Warwick University, chairman of the BSA, explained it was necessary to stand firm against any possibility of a witch-hunt.

"We have adopted this fairly unusual procedure because it is a question of the academic integrity of association members named in the pamphlet. Professor Gould is perfectly entitled to argue a thesis, but we do not see how his naming of names was justified, especially in light of possible consequences for members."

It seemed unlikely this week that Professor Gould would reply to the BSA's charges. His collaborator in the study, Professor David Martin of the London School of Economics, ceased to be a member of the association some time ago. His view, and it is shared by a number of the senior sociologists working in British universities, is that the BSA is no longer a serious representative of the profession.

National need to be key in engineering research financing

by David Dickson

The engineering board of the Science Research Council is planning to introduce major changes in the way it allocates its £14m annual research grants budget.

Under the new scheme, expected to be endorsed by the board at its meeting next week, various areas of research would be identified as qualifying for particular support on the grounds of their contribution to national need. These "priority areas", which are likely to include fields such as microelectronics, energy utilization and materials aspects of medical engineering, would be given both protection and priority in the allocation of research funds.

In particular, the board has proposed that initially at least 40 per cent of its research money should be allocated to priority areas. These would be identified on the basis of proposals for priority areas put forward by the individual committees.

Furthermore, any research funds allocated to a committee for expenditure on a priority area would be returned to the board if they were not used by the end of a particular session rather than allocated elsewhere by the committee as tends to be the current practice.

The board hopes the net result of the new scheme will be to demonstrate its determination to support those areas of research which it feels to be important in the national interest, rather than merely responding to the grants applications that it receives.

One result will be to introduce much more competition between committees bidding for research funds, as well as when the board claims will be a larger degree of ideology that the prime responsibility money between the committees.

But it is also likely to result in a more *dirigiste* role for the board, and a further step away from the ideology that the prime responsibility of the SRC is to support university and polytechnic research on the grounds of high scientific merit.

Concern at the implications of this

continued on back page

Row flares over press closure threat

by Judith Judd

A major row is brewing in London University after the decision of a powerful university committee to suggest the closure of the Athlone Press. The press was set up in 1948 to publish academic books originating within the university which might not otherwise have found publishers and other books to be accepted at the press's discretion.

The press's supporters are furious about the confidential report of a three-man working party which earlier this year said it "was providing a service which could profitably be provided by outside agencies, preferably with the help of a publications fund". The scheme subsidy for 1976-77 is estimated at nearly £47,000.

Now the Joint Committee of the Court and Senate for Collective Planning says it "is disposed to propose" the press's closure, though the staff has not been allowed to see the report nor their board of management's reply to it. The press's future will have to be considered by the academic council, the court and senate before a decision is taken.

Staff at the press are angry about a letter which Dr F. M. G. Willson, the university's principal, wrote to the staff association in July saying the subsidy required was not justified in terms of reputation within and outside the university, considering the other ways in which scholarly publications could be supported.

The press's supporters, who asked not to be named because of a ban on speaking to newspapers, regard this as a slur. They say the press's performance emerges favourably from a comparison with university presses at Manchester, Wales, Edinburgh, Liverpool and Leicester and that it is unfair to compare it with Oxford and Cambridge. No British university press has so far been closed.

In its report the working party chaired by Sir Desmond Plummer estimated that only 30 per cent of the books published would have been accepted by a commercial publisher. It also noted that only about two thirds of the "risk" books were by London University authors and argued the case for a publications fund.

In its reply to the report the press's board of management, whose chairman is Dr J. N. Black, principal of Bedford College, said the press had made a substantial

continued on back page

AUT claims 28 per cent pay increase

by Frances Gibb

University lecturers are to seek a pay rise of 16 per cent for 1977/78 it was agreed at an emergency meeting of the Association of University Teachers last week. This would be on top of the pay claim now before the Government for rises of between 12 and 16 per cent from August 1, in settlement of the pay anomaly which arose in 1975.

If both claims are met the combined rises would be between 28 and 32 per cent, bringing a lecturer's minimum salary to about £4,222 a year and a professor's average salary to over £13,000 a year.

The allowance for annual pay increases contained in the universities' grant for 1977/78 is only 5 per cent, however. But the Government has indicated that it will be reviewed if pay and prices increase at a rate "substantially higher" than that allowed for.

The annual increase has yet to be agreed with the Universities Authorities Panel, the joint pay negotiating body between the university authorities and the AUT, but in any case the association is insisting that it is secondary and without prejudice to the settlement of the anomaly.

To further this settlement, lecturers overwhelmingly agreed by 230 votes to nine that a mass meeting and lobby of Parliament should be held on November 16 and some 5,000 are expected to attend. More militant proposals, such as not taking part in university admission procedures or teaching new students, failed to win support.

The executive is to write to every university in the country asking them to close for the day of the national meeting so that lecturers will be able to attend.

Mr Laurie Sapper, general secretary of the AUT, said the resolution was a measure of the strengths of feeling among lecturers over their pay claim.

The emergency meeting, held in London in camera, heard a letter from Mrs Williams, secretary of state for education and science, to the chairman of the Universities Authorities Panel, reiterating the Government's commitment to rectifying the anomaly.

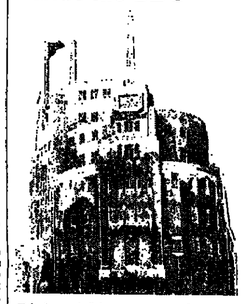
But she emphasizes the Government's commitment "to restraining the rate of growth of earnings" and that there was no simple way of rectifying the pay anomaly".

Mr Sapper said that never before had the Government stated so firmly its intention to settle the pay

continued on back page

Contents

Inside the BBC



Richard Hoggart reviews Tom Burn's new study of 10 years of change at the BBC, 19

Teaching to teach
A new report urges universities to spend 5 per cent of their budgets on staff development, 8

Science and values
Sir Andrew Huxley replies to Robert Young's criticisms of his British Association address, 21

Sociology books
John Rex on alternative sociologies and Colin Crouch on social mobility are among the reviewers of new sociology books, 22-26

The Bakke case
The US Supreme Court will hear this test case involving reverse discrimination in college admissions next week. Report, 9 Leader, 10

Nottingham's PGCE
Judith Judd reports on Nottingham's plans to reform its postgraduate education certificate, 7

The THES
We regret that this week's issue of *The THES* has had to be reduced in size and apologise for the misprints it contains. This is due to continuing problems in the reading room

Academic developments	4
Don's diary	5
North American news	9
Overseas news	9
Letters	10, 27
Classified Index	11
Noticeboard	20

Cambridge recurrent studies forecast

by Frances Gibb

Cambridge University may have to expand into recurrent education and training to cater for social needs in the next 20 years, Dr Rosemary Murray, vice-chancellor, said last week.

It was expected that the numbers of university first-degree students would decline in the 1980s, she said, and even Cambridge could find itself with fewer undergraduates. "Academic planning of a kind that cannot be narrowly subject-based will be essential. The university might wish to increase its involvement in post-experience education and training."

Canabridge, with its exceptional research and other academic resources, was particularly well placed for broadening its post-graduate activities to undertake in-service training, post-experience courses, conversion courses, refresher courses and others. Its future in the last quarter of the century would be looked at by the long-term development committee, she said.

Dr Murray, who is also president of New Hall, was addressing the University's Regent House on the occasion of her retirement from the two-year vice-chancellorship. She will be succeeded by Sir Alan Cottrell, Master of Jesus College.

She warned that other changes might be necessary. If the load of formal undergraduate examinations continued to increase fundamental changes would have to be made in the system of examining.

"It might be necessary to spread it over a longer period, or for the examinations to be conducted in a different way. The tripos system continues to provide flexibility, but the pressure in some courses is considerable."

Dr Murray spoke also about the target set up by the University Grants Committee of 11,200 students at Cambridge by 1980. That was "rather less" than the number which the university expected the colleges would wish to admit, taking into account increases in clinical students, BEd students from Homerton College and the first students from Robinson College.

She noted that one unexpected result of the increase in the proportion of women at Cambridge had been the better balance between arts and science students. More undergraduates were reading scientific subjects, while the number of those reading English had not increased correspondingly.

Cambridge, like other universities, would be much more dependent on student numbers this session because of the much greater proportion of its income—23 per cent as compared with 7 per cent—now coming from student fees. But owing to "continued vigilance" the university had been able to reserve a surplus and draw on it to maintain a reasonable level of expenditure and avoid damaging emergency measures.

She added that grants for 1979-80 and 1980-81 would not be known until December, but Cambridge could not expect to benefit greatly from any increase in the total grant because it had relatively little expansion planned.

From crooked faces to old pawnbrokers

by David Walker

Research supported by the Social Science Research Council includes an anthropological investigation of death in Benares, a collection of the minutes of the Polish Politburo in 1945, a study of the correspondence in the *Honest to God* controversy and the odds offered by bookmakers on football league matches.

The SSRC this week published its annual guide to the work it funds in universities, polytechnics and specialist institutes. It is an invaluable guide to the scope and cost of social scientific research. Social science work ranges from the obviously useful, such as a study of the photo-fit system for recalling faces at Aberdeen University, to the obviously academic, such as a Manchester Polytechnic project looking at the role of the pawnbroker in nineteenth-century Lancashire.

The death in Borneo project is being undertaken by Dr J. P. Parry, of the London School of Economics. His aim is to fill a gap in the ethnography of South Asia by finding out more of the various specialists associated with death, burial and mourning in Hindu culture. Colleagues at the LSE have just completed a £6,000 project collecting documents on the Polish Workers Party prior to Poland's liberation in 1945.

From being a theological document Bishop John Robinson's *Honest to God* has now become a document for the sociology of religion. Dr R. C. Towler of Leeds University has completed a £7,000 study using computers to reveal some of the categories of religious thought current when it was published.

Research supported by the SSRC 1977, £2.50 from SSRC, 1 Temple Avenue, London EC4Y 0BD.

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One of these blocks of council flats in Glasgow, abandoned by tenants because of an alleged fire risk, may be turned into student accommodation. Glasgow District Council is to consider turning Red Road Court into student flats. The 30 storey block has been troubled by vandals who are believed to have started a fire that killed a 12-year-old boy recently. The city's housing department is making contact with Strathclyde and Glasgow Universities and local further education colleges to find out if the building suits their needs.

Tribunal dismisses sex discrimination claim

by Owen Surridge

Allegations of sex discrimination made against the Harper Adams College of Agriculture, Newport, Salop, were dismissed as unfounded by an industrial tribunal at Salop. However, the chairman, Mr Anthony Gordon, refused an application for restitution of costs incurred by the college, which expects to have to meet a bill of some £600.

The case was brought by Mrs C. Mansell, known professionally as Ann Baker, who gave her age as 46. She claimed her application for a job as head of the college's animal husbandry department in January was turned down because she was a woman. She was allowed access to confidential information supplied by other applicants and although identifying details were obscured she was able to identify some of those concerned. She claimed to be as well qualified as those shortlisted for interview.

Counsel for the college, Mr Ian Morris, said Miss Baker's practical experience of farming and lecturing was "extremely thin". "I accept that this lady is extremely eminent academically but she is not of a type required for the job." He said the man appointed had more appropriate practical experience, as had many of the shortlisted applicants and that on the basis of information given in the application form it was plain as a pikestaff that the person who got the job was better qualified for the position.

Dismissing Miss Baker's claim of discrimination as nonsense he said: "It is a matter of sour grapes."

He said the whole of her evidence was based not on the grounds of sex discrimination but that she was better fitted for the job: "This is the subject of opinion of a woman who wanted a job but did not get it."

Describing her claim as "vexatious and frivolous" Mr Morris called on the tribunal to stop the proceedings on the ground that she had not made out a prima facie case, a submission the tribunal upheld.

Afterwards Miss Baker claimed to have spent between £100 and £150 pursuing the case and said she would appeal on the ground that she had not been allowed an opportunity to cross-examine.

Triennial polytechnic funding proposed

by Judith Judd

A call for a triennial or quinquennial planning system for polytechnics has been made by Mr David Bethel, director of Leicester Polytechnic and the new chairman of the Committee of Directors of Polytechnics.

Mr Bethel, who was speaking at a conference of polytechnic finance officers at Bristol Polytechnic, said such a system would ensure even better use of public money. If the present downward trend in national inflation was sustained, there was no sensible reason why triennial or quinquennial planning should not be introduced.

It was impossible to achieve real cost-effectiveness using annual budgets. Polytechnics, like universities, resembled large industrial operations.

"In industrial terms, we have a product which takes from two to six years to produce." Polytechnics could attempt to plan but in the end, any surplus from one year could not be carried forward to the next. "We are often rushed into decisions to meet fiscal year deadlines and this is no way to plan and use resources."

A triennial planning system implied that polytechnics must be removed from local government control or that special arrangements should be made for them even though the maintaining local authorities remained the legal paymasters.

A change in the financing of polytechnics would mean a change in their government. In Leicester the relationship between the Polytechnic and the local authority was happy one. He understood that it was not always the case and for this reason he expected the Oakes Committee, which is looking at the management of higher education, to recommend the strengthening of the governing body.

Mr Bethel said the policy contained in the Government's 1966 White Paper *A Plan for Polytechnics and Other Colleges* still stood, though many thought it had been modified because of the reorganization of teacher training.

One result of this reorganization had been amalgamations of further education colleges into larger units, "often rather erroneously, I think, as institutes of higher education". But the policy was still to concentrate most advanced further education courses in the universities in the polytechnics.

The academic role of the polytechnics had extended beyond the forecast intentions of the 1966 White Paper with the development of teacher training, the encouragement of CNAA degrees and not least in master's degree courses.

The next decade was likely to see a further extension through a cyclical, credit-bank approach to higher education which might blur the present sharp and artificial divisions between full and part-time study.

'Revise pay structure'

Polytechnic administrative officers and treasurers ought to be paid on a national scale, a working group of finance officers has recommended.

Chaired by Mr. H. D. Carter, of Liverpool Polytechnic, the group claims polytechnics are unable to recruit appropriate staff because there is no proper pay and career structure. While principals, heads of departments, lecturers and technicians are paid on national scales, administrators' pay varies according to the local authority maintaining the polytechnic.

"The differing attitudes with regard to salary reviews—or the lack of them—and their failure to vary from a common base, are all significant factors in the creation of anomalies resulting in quite wide variations in pay for similar work and responsibility."

The group says it has the support of the polytechnic directors for scaling national scales and parity with academic salaries. Its report is available from Mr. Carter at Rumford House, Rumford Place, Liverpool L3 9RH.

Social work emphasis tends towards the practical

The practical rather than the academic side of social work training has been given most emphasis in views recently collected by the Central Council for Education and Training in Social Work in two reports published last year.

Teachers and officials consulted about the CCETSW's plans for the future replied that there should be plenty of opportunities for older people with experience to enter the career of social work. They said social work tutors should have more training and more practical experience.

The CCETSW asked last year for comment on its proposals for a probationary year for trainee social workers, a four year cycle of higher education for intending social workers and the quality of teaching.

Cold water was poured on the idea of integrating the DipHE as the first stage of social work training. Reservations were also expressed about professional training for students aged less than 23 years. The social work professional associations feared a bias in recruitment towards young graduates who lack the necessary maturity and experience.

The idea of a probationary year during which a social worker's responsibility gradually built up was supported.

After digesting these replies the CCETSW intends to start a new round of discussion on other proposed changes in social work training. These include raising the minimum age for entry to Certificate of Qualification in Social Work courses to 23 from 22; raising the basic educational requirement for the CQSW to two A levels from five O levels and insisting that all candidates should have a minimum of 12 months paid job experience before or during training.

Management tutors find *fault*

Much more time must be given to the study of industrial relations in management education and training, the annual study course of the Society of Industrial Tutors held last month at Manchester University has recommended.

Tutors concerned with management courses said there could be as little as six hours on this subject out of a 300-hour course. Yet anything from 75 per cent upwards of many managers' time was spent on issues connected with industrial relations.

One way for the society to influence changes in management studies would be to devote some of its impressive group power to ensure that industrial studies and industrial relations became a central part of all management education and training syllabuses and courses, it was suggested. More specifically, because of its involvement in trade union education, SIT should aim to establish trade union studies as a subject in its own right and especially as a subject for study by management courses where it was so often neglected.

Earlier Mr Geoffrey Robinson, MP, speaking about the problems of management had emphasised the waste of resources caused by the "them" and "us" mentality of "Managers", he said, "need three qualities above all more: a sincere belief in the moral right of employees to be involved in workplace decisions; a willingness to be truthful and to accept an ability to be flexible and change their plans." These elements were often absent from many management courses.

Staff angered by poly reorganization

by Clive Cookson
science correspondent

Lecturers at Newcastle Polytechnic are protesting about the merger of two departments which is going ahead against the advice of academic and faculty boards and, they say, without adequate consultation.

The formation of a new department of electronic engineering and physical electronics out of the departments of electrical and electronic engineering, and physics and physical electronics, was agreed by the polytechnic council at the end of last term. Last month the polytechnic advertised for a head of the combined department and applicants will be interviewed next week.

Dr D. J. Valsey, local secretary of the Association of Polytechnic Teachers, said his members were extremely concerned on two counts: "The manner in which the decision has been taken and the effect which the decision may have on the career prospects of individuals within the two departments.

"For the council to arrive at a decision contrary to the recommendations of the academic board and the faculty boards would not be considered out of place, had the process of consultation between the various components of the polytechnic been exhausted.

"However for a decision to be arrived at in a manner which leaves the suspicion that the consequences were not even known, let alone taken into account, is not conducive to any feeling of confidence."

The chairman of The National Association of Teachers in Further and Higher Education at the Polytechnic, Mr Ted Kowalkiewicz, said his union, too, expressed "grave concern about the manner in which the two departments were forced to combine".

The role of faculty and academic boards was in doubt following the decision, he felt, and NATFHE would be meeting the polytechnic's acting director, Dr Laing Barden, and its chairman and vice-chairman to discuss changes in the articles of government. We will be putting certain proposals that will strengthen the democratic role of the academic boards."

NATFHE has accepted that it is too late to reverse the merger decision, though the whole electrical engineering department is very unhappy about it, said Dr Kowalkiewicz, a member of the department. The physicists, who have a bigger research programme but fewer students than the engineers, are thought to be more enthusiastic.

A spokesman for the polytechnic emphasized that there was nothing unconstitutional about the way the merger was approved—a point agreed by the unions after taking legal advice. The academic board had rejected the proposal by only one narrowest of margins, he added.

The polytechnic says the combined department, which will have a staff of 50, as a unit with great strength in research and community involvement. "The merger makes available considerable opportunities for staff development."

There is no question of redundancies as a result of the merger, though the unions fear that posts left vacant as staff leave or retire will not be filled. They claim there is little academic justification for the move.

Young jobless aid detailed

by Patricia Santinelli

A new drive for an extra 10,000 further education places by 1981 and more training and work experience schemes for the young unemployed are described in a joint circular issued this week by the Department of Education and Science and the Welsh Office.

The circular "Unemployed Young People" which has gone to local education authorities, FE establishments, regional advisory and examining bodies follows the June announcement that the Government had asked the Manpower Services Commission to operate a new programme of opportunities for this group on the line proposed in the Holland Report.

It is envisaged that 1,000 of the non-advanced FE places will be in Scotland and that the remainder in England and Wales will grow at the rate of 3,600 annually between 1978-1980, to reach 9,000 between 1980-81.

They will be in addition to the increase in student numbers on non-advanced further education courses already included in the department's latest projections: for full-time sandwich courses—303,000 for 1977-78 going up to 340,000 by 1980-81; for part-time day courses—540,000 going up to 659,000; evening courses remain unchanged at 750,000.

It is hoped that authorities will be able to absorb the extra students in advance of new accommodation being provided by the 1978-79 higher and further education building programme, which included an initial instalment of £6m for new building to provide 4,000 additional places. However, LEAs have been asked to submit revised bids for this period.

It is also expected that additional expenditure to cope with this expansion will be reflected in the recently announced Rate Support Grant settlements for 1978-79 and later years.

A number of possible course developments are set out in the circular. They include more vocationally oriented courses, especially for girls; improved provision for the disabled and handicapped and for ethnic minority groups; more three-day-a-week courses for young unemployed receiving supplementary benefit; and provision for school leavers of low educational achievement and social competence.

Housing crisis overcome

An end to the annual student accommodation crisis is reported by Hull and Edinburgh universities this year.

Hull says: "Although the admissions figure for the new session is not yet finalised, it seems unlikely that any temporary sleeping arrangements will be necessary this year." And at Edinburgh, Mr James Wright, senior warden of the Pollock Halls of residence, writes in the university bulletin: "We have devoted a great deal of money and effort to this problem. We are reasonably confident that no fresher need come to university without having somewhere acceptable to live."

Hull now accommodates almost 70 per cent of all students in residence. This year, it has managed to acquire an extra 77 places by converting guest rooms, linen rooms and some houses which were being used for other purposes. It has also found extra places in lodgings.

At Edinburgh, some 80 per cent of new students can be found places in residence. Mr Alex Stewart, director of the accommodation service, said: "We certainly do not anticipate an accommodation crisis this October though there may be temporary problems for those who have not made their arrangements in advance."



It's only Ad Hoc 'n roll—Jim Hornsby as Eddie the Trunk, one of the characters in Rumpus, a comedy rock operetta staged at the University of Aston, Birmingham, by the Ad Hoc Theatre Company following a successful run at the Edinburgh Festival.

Mr Vyas attends reopened NELP social work course

by David Walker

Teaching started this week on the controversial social work course at North East London Polytechnic and among the students was Mr Suresh Vyas, the Newham Borough education welfare officer at the heart of the dispute between NELP, the local authorities controlling it and the Central Council for Education and Training in Social Work.

Mr Vyas's application for the course was rejected earlier in the year. This provoked the joint polytechnic committee, representing the funding boroughs of Newham, Waltham Forest and Barking, to order closure of the course.

He was admitted on the orders of the polytechnic director, Dr George Brosan, after the NELP student union had secured the opinion of a High Court judge that closure was illegal. Mr Vyas joined the course despite a letter from the CCETSW to the polytechnic last week reminding it that agreed procedures had been abused.

This week a group of the second-year students on the course wrote to CCETSW expressing their unhappiness at the possible devaluation of their qualification.

Staff on the course said this week that there is still no resolution of the basic dispute. They do not accept that Mr Vyas has been properly admitted and are remaining in contact with their trade union, the National Association of Teachers in Further and Higher Education.

Now that term has restarted there is likely to be a wide debate inside NELP about the summer's events which saw students being told by polytechnic authorities not to attend the course, then their union going to a judge in chambers who declared this action to be outside the polytechnic's powers.

Letters page 10

Body begun amid attack

A new organization to promote interdisciplinary development studies was launched in London last week. Initially it will be known as the British and Irish Development Studies Association.

In the words of the prospectus it will encourage discussion of "underlying theoretical and methodological issues" concerning the development of countries which have until recently escaped industrialization and the technological revolution.

Its secretary, Mr Ray Bromley, of the development studies centre at the University College of Swansea, told the inaugural meeting of about 80 people that there had been many complaints that development studies were dominated by those whose primary allegiance was to other disciplines. There was also much argument about their nature and purpose. It was hoped the new body would promote communication between those involved and stimulate discussion.

Earlier Mr David Eversley, former chief of the GLC planning department and now senior fellow of the Centre for Studies in Social Policy, made a spirited attack on England's town planners, whom he accused of gross incompetence. For good measure he levelled a charge of basic dishonesty against those of their number who lectured and purported to run courses on planning.

"I refer to getting people from overseas to come here to learn about planning from a country that has managed its planning worse than any other.

Planning courses, he said, were run by failed planners who had not succeeded in bringing about the changes they were paid to make.

NUS calls for greater local council power

by Judith Judd

Greater powers for local authorities over further and higher education and a national council to channel resources into priority areas are suggested today by the National Union of Students.

The proposals form part of the NUS submission to the Oakes committee which is investigating the management of higher education.

The submission, called "Education and the Community—a democratic challenge", also wants community forums to be set up to give people a say in the running of their local colleges and profiles to be drawn up by boards of governors outlining the needs of the community served by the college.

Ultimately, the NUS envisages the universities being brought under the control of local education authorities.

Describing its general attitude to the management of higher education the union says: "Education in the maintained sector is currently organized on the assumption that non-advanced further education meets local need and advance FE meets national need.

"This distribution is used to legitimize immense inequalities in institutional financing and student financing and it stems from categorization of national and local needs that is now ill-conceived."

The union calls for a new system of funding which would remove disincentives against non-advanced further education and give back to local authorities the responsibility for managing and controlling further education and non-university higher education.

The local authorities would work in conjunction with a National Council for Further, Higher and Adult Education which would pick out areas of educational need and draw on a national fund to establish new courses.

Once such a course was established the council would arrange for it to be taken over by the local authority. Membership of the council would come from local authorities, educational bodies such as teaching unions, students, the Committee of Polytechnic Directors and the Council for National Academic Awards, government agencies such as the Manpower Services Commission and the TUC and CBI.

The union proposes that the council should be chaired by the Secretary of State for Education.

EEC's postal course plans criticized

EEC proposals to regulate British correspondence colleges could reduce educational opportunity for a vast range of students, the colleges' accreditation board has told the Government.

In comments passed this week to the Department of Education, the Council for the Accreditation of Correspondence Colleges criticized a draft directive published during the summer by the Commission of the European Communities as costly and inflexible.

Mr L. J. Harper, honorary secretary of the council, explained to *The Times*: "This directive was drawn up by people who know little of our system and how it has developed. Correspondence colleges like ours have never been established on the continent; there are few if any parallels to our accreditation council with its system of inspection and periodic reinspection."

The draft directive seeks to bring correspondence students under the umbrella of consumer protection legislation and requires colleges to be much more generous in granting refunds and allowing students to cancel study agreements. It puts the onus of responsibility on the college to obtain full official accreditation and to check the accuracy of its advertisements.

The objections—which also come from such public bodies as the National and Local Government Officers Association and the Cooperative Union's college—are that the directive would allow unscrupulous students to receive course materials, duplicate them and then claim their money back. In addition the right of refund, which statutory further education colleges do not have to pay, would bankrupt many colleges or cause considerable fee increases.

The accreditation board claims that British students are perfectly well covered by existing consumer protection legislation. The EEC, it says, ignores the board's role as inspector of courses and colleges. Also the Brussels officials ignore the British tradition of colleges preparing students for specific examinations rather than giving tuition for a particular length of time.

Mr Harper warned of British colleges being "victimized". Correspondence education in Europe, he said, was much more akin to our adult education.

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The right medicine for some physicists

by Fred Kavalier

Queen Elizabeth College, London, and Guy's Hospital Medical School are together offering a course from October 1978, which will be an ideal training for the intending physicist with an interesting clinical medicine or medical research.

Physics with medical applications is a three-year BSc honours course. It is, essentially, a physics degree, because its organizers believe the hospital physicist is "first and foremost a physicist, and is neither a pseudo-clinician nor a medical technologist."

First, the course provides the fundamental training of a good honours degree in physics: electromagnetism, heat and thermodynamics, optics, atomic and nuclear physics, quantum physics and so on. This represents about 75 per cent of the new course and takes up most of the first two years which are concentrated at Queen Elizabeth.

The remaining 25 per cent, mostly in the third year, consists of courses and projects in medically oriented physics.

Medical topics include the interaction of ionizing radiation with matter, including, for example, the treatment of cancer with radiotherapy, the theory of image formation, with applications to X-ray diagnosis and scanning and ultrasound, and weak signal electronics, including EEG and ECG diagnosis.

Research projects are under the supervision of medical school or hospital staff and will be closely related to the research programmes in the clinical physics and biophysics department at Guy's.

Although the degree has been designed with a career in hospital or medical physics in mind it contains the same fundamental physics as single honours degree courses. It has the basic physical content necessary to be recognized for membership of the Institute of Physics. So, if graduates decide not to go into hospital physics they are not precluded from other careers in the subject.

Two A levels in physics, chemistry, mathematics or biology or associated subjects are required for entrance. There will be 20 places in 1978.

Movement fo teachers at Durham

Ecological and human stu studies are among the attractions of a new BEd c at New College, Durham, college, formed by the merg Durham Technical College Neville's Cross College of Edu offers a pass degree which lea qualified teacher status from autumn.

The course is divided into elements: professional stu studies, education studies, and elective studies. The profes teaching prepares the student "first schools", junior and mi schools, or secondary sch Elective courses in this area in drama in the early and mi years of schooling, health educa and an introduction to educa technology. It is hoped to offer a course in teaching RSH o from 1978.

Education studies is design support the professional st examining a number of pro themes. This takes up a two years. In the third yea tion studies look at the psyc sociology, history and philos education.

The third element, de studies, seeks to provide deeper intellectual studies which will need built for their own subje in later work. The electives in art, ecological studies, Engl French, human movement and geography, mathematics and histo

Proposals to convert the cou to a four-year honours degree w be submitted to the CNAA in year. If approved it will be ava able to students entering in 19

Teaching or administration

by Judith Judd

Students taking the diploma in higher education at Bradford College are now able to continue their studies for a third year and gain an unclassified BA.

The new degree, which has taken its first students this term, is an interdisciplinary course with a strong emphasis on the social sciences, the organization of society and the place of individuals in organizations.

The third year has been constructed to take account of the recruitment of students on the basis of no firm vocational commitment other than to "work with people". The course thus provides an opportunity to defer a choice between teaching and administration until the end of the second year, in addition to exploratory experience of work and a general education.

To this extent the course is competing for students who might otherwise choose liberal arts higher education courses but not business studies or social administration which assume much more specific career intentions.

Though it does not provide a specific vocational training it is intended to equip students with knowledge and skills relevant to work.

The course aims to teach a number of skills, including how to be analytical about themselves and their environment. It also offers teaching about industrial society, organization and professional studies and aims to help students appreciate the importance of "coping" skills by practical exercises.

Full science sandwich

by Clive Cookson
science correspondent

The new sandwich degree programme at Sheffield City Polytechnic started this term with 115 students—25 more than the course quota.

Dr David Hills, the coordinating director of studies, is delighted with this response to a programme he has been planning for five years or so. It leads to three possible BSc degrees, with or without honours: applied science, applied chemistry and metallurgy and microstructural engineering.

First year students study three of the four main sciences offered, chemistry, physics, biology and materials. Each has two possible paths through the first year, an A route and a B route. A is for students with A level in the subject; B is a separate course that includes two hours' extra teaching a week and brings those without A level to the same point as the A students at the end of the year.

The system is intended to allow a flexible entrance policy, while matching each individual's ambition to his or her academic background. Twenty per cent of this year's students are taking two B routes and one A, and the remainder are following two As and one B.

Students commit themselves to one of the three specialist degrees at the start of the second year.

Industrial experience is on the thin sandwich pattern, with two periods in industry in the second and third years.

This will be sweet music to the handicapped

by Patricia Santinelli

If music is really the food of love then there is hope that a course launched this week by the Schools of Communication at Central London Polytechnic will bring a new dimension to the kind of music education offered to handicapped adults.

"Music and the handicapped adult" is said to be the first course of its kind. It is designed for teachers and those who work with handicapped people and aims to change their attitudes and give them a greater understanding of the problems the handicapped face.

According to Janet Wyatt, the course tutor, who also teaches music at Trinity College and with groups of handicapped on a part-time basis, most of the work carried out up to now has been with children and there has been a training course for those who want to work with handicapped adults.

On the course, which is to run on consecutive Wednesday evenings until December 7, each aspect of handicap will be considered with the special adaptations and problems to overcome it, so that handicapped people can develop their music potential both as individuals and in groups integrating with able-bodied people wherever possible.

Topics to be covered include the use of music as a medium, problems of breathing, diction in singing, instrumental skills and setting words to music.



A demonstration of the Kathak style of Indian dancing was given to second-year trainee teachers at Bretford College of Education, Thames Polytechnic as part of a three-day specialist course on multi-cultural education. Dancer Alpana Sengupta mimed the story of Krishna and the butter-milk.

Construction management courses flourish

An MSc course in construction management starts at Heriot-Watt University this month. It is intended to provide advanced instruction in management principles for graduates employed in the building and construction industries, but it is also suitable for those career training to enable practising managers to up-date their knowledge of modern developments.

It lasts 12 months full time or two or three years part time.

Sheffield City Polytechnic's construction course continues to flourish. This is a four-year sandwich course incorporating both engineering and building production studies.

Adult classes defended as priority area

by Jane Feinmann

A discussion document defending adult education as a priority for local authority spending has been prepared by the Educational Centres Association and is currently being circulated among its half a million members.

The discussion resulting from the document is expected to lead to the publication of a policy document early in the New Year for circulation to Government departments, behind all this activity is the feeling that adult education is under grave threat because of the Government's educational cuts.

"We want to do our utmost to preserve the adult education service and to protect those who can afford the least", said Mr Ray Lamb, Secretary of the ECA. "Adult education is every citizen's right. For far too long it has been regarded as a periphery to the main education provision and so when times are hard, adult education is the first service to be cut."

The ECA has evidence that county councils all over the country are cutting back on spending on adult education and raising fees. But it sees the first priority as clarifying the immediate aims of adult education within the service and this is what the new document sets out to achieve.

It pinpoints two opposing approaches to adult education: first, the "pink-shirt syndrome", which seeks to limit provision to evening classes in cultural subjects for professional and wage-earning people, leaving other provision to the social services. At the other extreme, there are the "ghettoists", who want to provide for the needs of the elderly, the illiterate and the disabled and let the able-bodied look after themselves.

But, says the ECA, while "we cannot ignore the dilemma, the answer is not to cut off resources from one group or another but to help each according to our ability and their needs. The important thing is to maintain the whole educational community".

It says that a good adult education programme should offer remedial education, second chance education, social education and adaptation to social change, retraining and the development of useful skills as well as the development of personal resources.

Life in the late twentieth century, it says, makes it essential for learning and development to continue after school. "Boys and girls are educated at school with jobs in mind, but many of them are leaving to face long-term unemployment while men and women, who have been led to believe that their moral and patriotic duty is to work harder, often to the impoverishment of their personal resources, find themselves redundant and dependent on those very personal resources if they are to maintain their integrity as human beings."

British student unions adopt nine jailed South Africans

Nine South African students who were jailed last year under the Terrorism Act are to be "adopted" by British student unions.

The nine, all members of the South African Students Organization (SASO), were sentenced after a trial which lasted 22 months. All were found guilty of committing acts capable of endangering the maintenance of law and order.

Unions belonging to nine of the 43 National Union of Students' area organizations are being asked to adopt one of the jailed students and to campaign for their release.

"World attention has been focused on the situation in South Africa following the tragic death of Steve Biko, the founder of the South African Student Organization", said NUS national secretary Mr Trevor Phillips. "We must now make people aware of the plight of other jailed students before it is too late."

Each NUS area will mount a campaign of letter writing, petitions and lobbying aimed at publicizing the students and intervening on their behalf. Each has been sentenced to spend five or more years in prison.

● An all-white tour of British universities by a South African debating team has been cancelled at the request of the NUS. The tour, by the debating union of the University of Cape Town, was planned for January and February next year.

The South Africans had written to a number of student unions asking them to act as hosts to the touring team. But after representations from the NUS the tour was called off.

Mr Humphrey Harrison, president of the University of Cape Town debating union, said in a letter to the student unions: "We have the greatest respect for the work NUS is doing and certainly have no intention of flouting them on this issue."

Mr Trevor Phillips welcomed the decision to cancel the tour. "We support the view of the United Nations and liberation movements in Southern Africa that there should be no economic, cultural or sporting links with South Africa", he said. "And we intend to support that view as long as cultural, sporting and other links perpetuate the system of apartheid."

DES has 'not grasped need for art curriculum study'

The Department of Education and Science and the Secretary of State for Education have not grasped the need for a serious study of the art and design curriculum, the National Society for Art Education said last week.

Presenting the society's policy statement, *A Future for Art and Design Education*, Mr Leonard Slopsisi, president of the NSAE, said that the Government's Green Paper had missed the opportunity of restructuring the curriculum and missed the opportunity of restructuring the curriculum and removing its emphasis on theory.

"Educational trends have moved in the past 10 years to adaptability and teaching people how to use information", he said. "The bias towards the theoretical rather than practical approach has tended to relegate the subject of art and design. We looked towards the Green Paper to restoring some kind of balance, but this has not happened."

He added that art and design was a multi-million pound business in thousands of schools, colleges and polytechnics; it had a major part to play in general education and could also contribute to the country's prosperity.

The society, therefore, urged the Secretary of State to give urgent attention to the place of practical aesthetic education in the curriculum.

To achieve these aims the NSAE urged the respective national societies, Government agencies and committees concerned with art and design to coordinate their activities to evolve changes which would enable them to play a more effective role in education.

In this context, the NSAE sees the introduction of the whole band of vocational courses in art and design by the Technical Education Council as an important development in the area of design related studies. "Setting up these courses will emphasize that the design area needs to be better served by more appropriate courses and examinations; only if this happens will changes be possible at FE or HE level."

● Art and design teachers in polytechnics have come together to establish a new society devoted to the history of design. The chairman of the Design History Society is Mr Noel Lundgren, of Sunderland Polytechnic.

Don's diary

In Paris

This morning my usual café on the corner was closed so I went to a new one behind the Place des Victoires. The thick green coffee cups with the gold rim seem to have vanished from Paris, and the waiters from *Au pied de Cochon* drink beer for breakfast instead of red wine. It is a general trend they say.

The coffee is good here and I drink about two cups. It is the same every morning, and it goes on throughout the day. The coffee never food. You look at all the patisserie in the window and end up buying half a baguette; you avoid the cafés at lunchtime and eat bread and cheese in the *Palais Royale*, pretending it is still summer on those rigid iron benches; at four o'clock you return to the patisserie, but the good ones have gone. That eases the decision.

And then suddenly one evening you surrender and have a meal, a real meal, sitting down, with a book propped up against the oil and vinegar and a litre of wine. And you make it last for three hours.

The reading room has the same smell as 18 years ago, and it still gets full by 10.30. It is warm and familiar and little has changed, though great play is made of its democratized structure since 1968. I think there is still a *Bibliotequ Nationale* readers' committee though I have not had the voting papers for two years.

I remember voting once for Simone de Beauvoir and a Pole whose name I forget, but I never know whether they were elected. They do not tell you everything. What is really different is the lights. For some time now you have been able to switch them on and off individually. In the old days there was always the barest hint of collective revolt over the lights. As it grew dark and they still had not switched them on, the readers began to click the switches, like prisoners tapping on the pipes.

Friday

We have only one alarm clock in the family and that is at home to get everyone to school. Here it is the shattering noise of the dustcart. It does this street at about 6.45, bottles, tins, boxes, parked cars, vélos, the lot.

The dispute over nationalization goes on between the communists and the socialists. The English press see it as weakening the election chances of the Left, but here the Communist Party claims that its militant position is attracting young voters and the Socialist Party says that its firmness against communist demands is attracting the moderates.

It is a lovely day and I walk down to the river before going to the BN. All the road sweepers are black. Last night there was a meeting outside the *Centre Beaubourg* in memory of Steve Biko. It was simple and moving. A woman who had known him personally spoke first and then two others from black student groups talked about the future.

I spend the evening making a phone call and writing letters. Leaving the BN at 8 one makes it a short evening, but it had not been a full day's work. I began to run out of my daily quota of books at about four, so had a long tea with Gill. Do they limit us to 10 books a day for administrative or moral reasons?

Saturday

A film screened in the middle of the day. Stolen time. Long, pungent and evocative images of rural France and villages in the sun which look like a stage set for *Henry V*. Peasants who probably knew him. A ruined château and coq au vin. It was very beautiful. You should never write these things down. There are things you cannot say when you look for the words.

In the streets there is a cold wind. Hot chocolate, but I cannot find any chestnuts. I catch up on three days of *Libération* and get back late to bed.

Sunday

It can be lonely in Paris, though I know I have a week of friends ahead. Another lovely day, ideal for the *Centre Beaubourg* which looks out as well as in. I cannot bring myself to call it the *Georges Pompidou Centre*. "*La monstre*" is easier, but no one seems to call it that anymore.

I hear that they exploit their staff, particularly young artists wanting to get a foot in the door, and all the spontaneous activities for kids have a long waiting list. But it is a living place none the less.

In fact it is the best thing that has happened to the Paris art scene since America took over in the early 1950s. That lost preeminence is now admitted after those absurd years of André Malraux as minister, when the idea of prestige was officially denied. Now it is obvious that virtually nothing is derived from Paris in the last few rooms of the permanent collection, except the *Magasin de Bon* which is a celebration of 1968 crossed with a Victorian curiosity shop. Well worth seeing.

As for the older moderns they look so much better here than in the old *Mused*. Relaxed even. So much so that I heard one American lady ask if they were all reproductions. "That can't be the real thing", she said, "with all these people milling around".

Today there is an exhibition on tatooing, which answers all the questions you have always wanted to ask. Did you know that in 1937 one in 10 people in America was or had been tatooed, one in five men and in 15 women? "When the time comes for you to be tatooed", says Lyle Tuttle, "the god of tatooing will tell you". You can find out more if you write to his address.

Monday

I bump into Marc in the BN. I have not seen him for years. He is preparing his courses and invites me to supper to meet Rhiannon and the two kids, and an Australian who is showing experimental films at the *Paris Biennale*. It makes something good to look forward to and I miss out lunch. Old habits die hard.

I go up to the prints room in the afternoon to look at drawings and engravings of the *exode* in June. There is an introduction to one set by Montherlant, with a lyrical account of a bombed and burning village. The villagers, joining the refugees on the road, watched, he says, with admiration in their eyes.

Fortunately the drawings are worth looking at, but it was doubtless Montherlant's name which sold the book in its numbered, de luxe edition. Classical tragedy, medieval fate or whatever, you can be lyrical about, but not that basic level of misery and fear. Too much is written about the literary and historical imagination, too little about the arrogance and insensitivities of those who appropriate the experience of others. Though we are all guilty of that.

Evening at Marc and Rhiannon's just next to Pigalle. Much talk about the local area not surprisingly. A huge meal, really excellent. The next showing of the *Biennale* films will be after I have left Paris. That is disappointing.

We exchange stories, or for me memories, of having young children in Paris flats, and I catch up on the different bits of the university world in which Marc and Rhiannon teach. Many of the people we all know, or knew of, in 1968 would now be described as career academics. That is a bit near the bone.

I get the last métro and find an elderly couple asleep in my bed. They are up from the country. "We booked room 14" they say. "This is room four", I reply, backing out. I suggest I sleep in their bed and we'll sort it out in the morning. I find room 14 and get into bed. There is a knock on the door. They've both been fully dressed, clutching their suitcases. They'd rather change now "otherwise we'd never be able to sleep". I try some joke about the dustcart and we swop beds.

Back downstairs I realize that all my things are still laid out round the room. Nothing disturbed. Perhaps they think all Paris hotels are occupied in shifts.

Tuesday and Wednesday

I remember a don at New College who used to maintain in his lectures that George I and George II were the same man, on the basis that they had the same mistress and prime minister. I have the same feeling about this Tuesday and Wednesday. Same place, same microfilm. But the evenings were different.

I am staying with Gill near the Rue Mouffetard, still one of the best communities in Paris. They have done a lot to resist the incursion of property speculators, and the grass roots cooperation of workshops, street market and tenants is a reality, not a romantic myth. But it will change if the fight is not continued, and there is anxiety about the future.

We had pizzas round the corner. Katy was there and we talked about the Red Army Fraction and political assasshination. It is the main subject of conversation among most groups on the political Left. Those who condemn, and those who support call on a mass of historical justification, and there is a tendency to argue that Germany is a special case, either then, now or both.

The French are much more involved in the issue than the British, perhaps because we have Ireland to argue about. But whatever the opinions of the left-wing groups, there is also a lot of uncertainty in the established Left.

Visited Tom and had lunch at a chauffeur's café in the 16th. The same topic, but also the anti-nuclear and ecological demonstrations at Melville and Larzac. There is far more optimism from Tom than from others. There was obviously a new-found determination at Melville.

We meet up again on Wednesday evening. Gill and I have a pleasant supper in her flat after her union meeting and we pick up Tom after the Larzac committee. The groups still look dispersed, but there is a lot of day-to-day political activity moving in much the same direction. Just see how widely *Libération* is now read.

Thursday

Thursday and another day at the BN. It is difficult to say a lot about work. Writing more than one line about hours of research every day is only likely to inflate it. I enjoy it too much for that. And it is a well-known experience anyway. So, too, is the rest, I suppose, along with the late flight home and the pleasure of being back.

Roderick Kedward

The author is reader in history at the University of Sussex.

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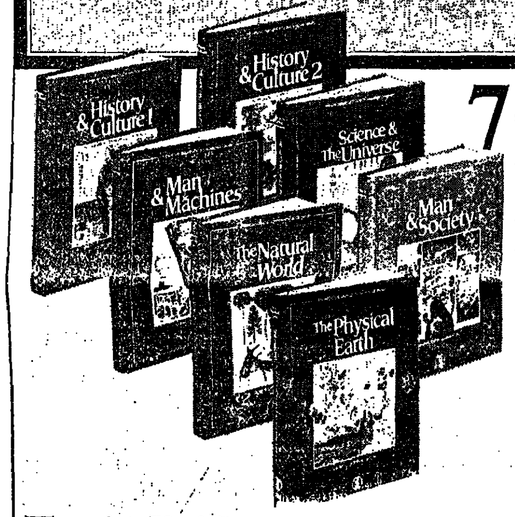
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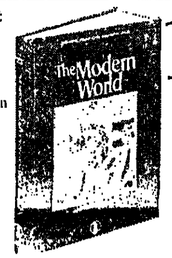
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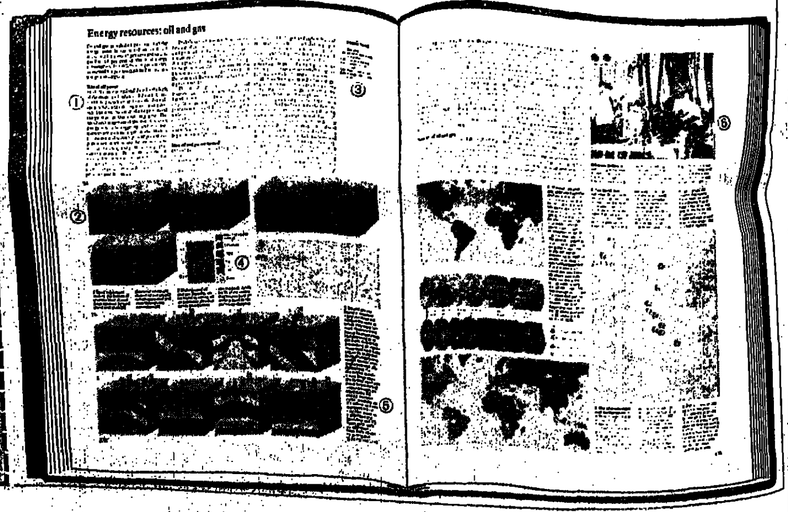


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What if the end of PGCE were nigh?

Judith Judd describes an exercise in forward planning at Nottingham University

The Department of Education and Science has sent a letter to all universities and colleges announcing the end of the postgraduate certificate of education course as we know it. What is your reaction?

Professor Ted Wragg of Nottingham University's department of education has just presented that hypothetical situation to 30 members of his staff at a one-day session on the future of the PGCE an dhe is expecting a serious answer. They spent o day at a field centre meditating on the one-year course and workingf out how they would design a new one from scratch, starting with three questions; what skills does a new teacher need, how can he help him acquire them and how can we assess his competence.

If the letter from the DES did arrive, Professor Wragg would welcome it. He believes radical changes are needed in the PGCE and the think-in is one stage in the preparation for o completely new course in Nottingham which he expects will begin in two years time. Though attempts to make university teacher education courses more professional have begun, there is still some way to go before they are equipped to deal with modern comprehensive schools rather than the grammar schools they were set up to serve.

The PGCE of the 1980s, Professor Wragg says, will have to offer a less prescribed set of experiences than it did in the past. "Twenty years ago a student might have expected to use the same textbook to teach French whichever school he taught in. Now there is a great variety of books and materials at his disposal and he may not use any textbook at all."

The immediate prospects for in-service training and even of an induction year seem poor, so it is important that a student should be able to cope with the options open to him when he finishes his training. "Courses will have to put more emphasis on self-determination, to introduce a number of ways of looking at things and to ensure independent decision-making. The Nottingham course, which has 250 students, already includes exercises in which they devise their own curriculum and plan team teaching in humanities.

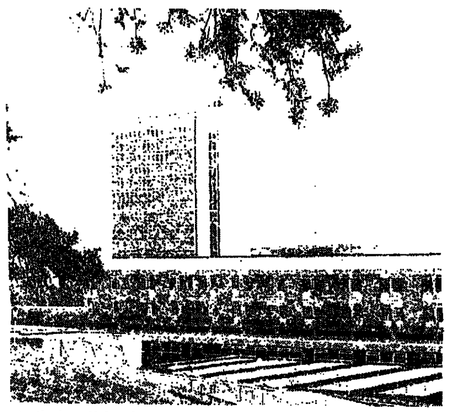
The second change that Professor Wragg exepects is a much greater importance given to classroom skills without, of course, making fewer intellectual demands on the student. The movement towards this has already begun and the cutback in teacher education numbers has focused attention on the content of one-year courses.

By 1980 about half those on teacher education courses will be trained in a year. The DES is also concerned and is funding a project to investigate teacher education in PGCE courses. The four-year project, which is being carried out jointly by Nottingham and Leicester departments of education, has just completed its first year.

The aim of the project is to decide what professional skills are needed for teaching and to decide how they can be developed. Though PGCE students are being studied, the work has obvious relevance for those concerned with the professional component of B.Ed courses and especially in colleges where the two plus one training pattern is being used. The researchers are looking at classroom management and control and mixed ability teaching.

The idea is not to produce a Nuffield or Schools Council type of model PGCE but to prepare suggestions and course materials which colleges and universities will be able to use if they wish. Professor Wragg believes that the standardization of all courses in teacher education is impossible and undesirable.

The first stage of the project at Nottingham was to complete 56 case studies of student teachers, looking especially at where their difficulties arose so that training procedures could be devised to help them. Perhaps not surprisingly, the researchers, who were asked to note three critical moments in the lesson, found that trouble was most likely to occur at the beginning or the end, in the laboratories or when the class was split up into small groups.



Nottingham University

Another common crisis point was when children were changing from one activity to the next. In the coming year, the project will be trying out experiments which should combat some of the problems.

One of these will be to have PGCE students working in pairs, with one giving the lesson and the other writing at the back of the classroom taking notes. Professor Wragg says this is less intimidating than having a head of department in the room but the second student can point out pockets of indiscipline which the teacher may not have noticed.

Another development already well advanced at Nottingham is the use of micro-teaching. Most education departments now make some use of these techniques and Professor Wragg is convinced of their value.

Nottingham has devised on the deceptively simple art of explaining. Students are filmed at the beginning of their course, correct themselves according to what they see and the difference by the end of the course is often amazing.

Professor Wragg says the great advantage of having children actually in the department is that when a student makes a mistake he can try to rectify it at once with another group of children instead of waiting until the next lesson.

The benefits of instant correction are one reason why the project is looking at closer cooperation with teachers in the schools where PGCE students are teaching. "A teacher in school can come back and see a student in the same lesson. He can work with the students in a way we cannot hope to." The move towards greater emphasis on professional skills should be coupled with a better relationship between schools an dteacher trainers, he says.

"Teacher trainers should be helping schools sort out their problems. For too long we have been lagging behind them when we should have been giving them a lead." One way of getting closer is to teach in them and Professor Wragg believes that all teacher trainers should spend some part of each year in a school. He himself has taught in summer schools for the handicapped and at a comprehensive in a tough area of Nottingham.

Another skill which could play an important part in a new PGCE course is mixed-ability teaching. The project organizers in Nottingham have begun by sending out questionnaires to 42 school heads asking them what skills the teacher of a mixed ability group needs. Students have also been observed teaching such classes and it is hoped to devise training programmes based on what has been discovered.

The transformation of the PGCE will not happen overnight. Professor Wragg reckons it will be two years before a new course can be launched at Nottingham. Nor will the transformation be sudden. Many of the seeds of change are already present in education departments. The results of the teacher education project's systematic investigations should give added impetus to the plans which are already under way.

Wreck holds treasure for marine studies

A significant piece of history – the wreck of a merchant ship which foundered at least 450 years ago – is being painstakingly explored 50 feet below the Menai Straits by the marine archaeology unit of the University College of North Wales, Bangor.

The wreck was discovered during an underwater survey of the area by the unit and what particularly excites Dr Cecil Jones, a tutor in the extra-mural department and head of the unit, is that its cargo of about 20,000 slates is virtually intact.

A number have been brought to the surface for examination and comparison with slates of known age. They have been identified as predating one of the oldest known roofs in Anglesey—that of the George and Dragon Inn at Beaumaris—which is roofed with early 16th century material.

The evidence, says Dr Jones, suggests that slate quarrying began in North Wales long before the generally accepted date of the late 18th century.

The undisturbed cargo is yielding important information about the ship in which it was loaded in Elizabethan days. The neatly stacked slates cover an area 30 feet by 14 feet, dimensions which, says Dr Jones, indicate that the vessel was about 55 feet long and 21 feet in the beam.

"These dimensions are typical of a ballinger, the barge-like general purpose cargo ship of 500 years ago," he says. Ballringers, hundreds of which were in service in the 15th and 16th centuries, were propelled by sail, with provision for oarsmen to provide auxiliary power in waters like the Menai Straits where tides run fiercely.

The discovery of the ballinger, within a few hundred yards of Telford's famous Britannia railway bridge linking Anglesey to mainland Wales, is particularly important to marine historians because most underwater explorations tend to concentrate on more exotic wrecks, such as those of warships and craft reputed to have been carrying treasure. Wrecks of more ordinary vessels have a lot to offer but have not received much attention.

The survey is being carried out in close cooperation with marine scientists at the university and with the help of Mr Sydney Wignall, a leading underwater explorer and adviser to the marine archaeology unit.

The discovery of the ancient vessel comes at a time when, in a university sense, marine archaeology has come of age. Apart from a small number of university sponsored expeditions to the Mediterranean in the 1950s and 1960s it was for long an amateur activity.

Those engaged in it educated themselves in its methods and improvised and modified as they went along. The Council for Nautical Archaeology, which coordinates the work of various groups and publishes papers on significant finds, was set up less than 10 years ago. But in the past decade survey methods have become more sophisticated and higher standards of underwater work have been achieved.

UCNW, Bangor, with its seaboard location has a strong tradition of innovation over the whole spectrum of marine studies and related matters. An important addition, a new degree course in ocean electronics, begins 12 months from now and will include a 20-hour teaching module on marine archaeology.

One of the newer aims of university-based marine archaeologists, Dr Jones says, is to provide marine scientists with a knowledge and appreciation of the value of such wrecks for historians. Whether wreck sites will provide more than just historical information depends on the questions the underwater archaeologists ask.

Dr Rodney Coates, lecturer in ocean electronics, sees this as an important component of the three-year course.

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Spend 5 per cent of budget on teaching staff to teach

The Staff Development in Universities programme (SDU) is a general title covering a variety of activities undertaken by groups of academic and administrative staff in 50 universities and university colleges between 1972 and 1974. It was organized by the University Teaching Methods Unit and the Department of Educational administration at the University of London Institute of education.

Among the groups involved in the programme one, struck by the unsuitability of case studies and exercises devised for managers in industry, got down to writing case studies and exercises especially for university staff. Another group examined the administration of universities and academic departments and produced a collection of suggestions for improving organization and introducing change. Other groups considered the notion of continuing education, the distribution of resources, the learning needs of professors, how universities treat women, and how to run university committees better.

A report on the programme, The Changing University, by David Warren Piper and Ron Glatter, has been published by the National Foundation for Educational Research, price £11.75. Extracts appear below.



Are old teaching methods good enough?

Slow start

To some participants the programme seemed slow in getting going and with the experience we now have it is probable that the organizers could respond rather better to some of the suggestions.

However, there are a number of points which need to be answered. At the start of the programme a number of participants looked for, not just support from the organizers but a lead as to what they should do. As that is the more normal way a programme is run a short time for adjustment may be expected.

One participant wrote (not without irony one feels): "Prospective participants appeared to have some initial difficulty in grasping what the programme was all about, possibly because the inter-related concepts of staff development and organizational development were too far ahead of the thinking of most people in universities."

Another remarked: "The unstructured form of the first meeting at Cumberland Lodge gave a useful and refreshing jolt to those of us who normally subsist on a diet of agendas and minutes."

The difficulty was compounded by the staggered recruitment to the programme. As was to be expected, those who became involved in a particular project got more from the programme, attended its meetings most frequently, and spoke of it most highly.

The SDU staff did attempt to service and support the various projects. The secretarial and administrative support by and large met all requests. The academic support was felt by one group to be occasionally a little thin—for example, in surveying the relevant literature for a particular project. It was our intention to provide such back-up and for the most part we did.

One final aspect of the "slow start" criticism might be mentioned. The impetus of the whole programme picked up enormously once the training materials began to appear and were tested. One participant remarked it was a pity we could not have started the central group by doing some exercises like the case studies, or the in-tray exercise. Almost certainly we would have involved more people more quickly if only we could have, but at the start there were no such materials available. From now on we are better equipped.

In conclusion, the organizers are fairly confident that the approach was basically sound and likely in the long run to prove a better strategy than predetermined direction. We, and others learnt a great deal from the experience which was a departure for us all. (The other 18 courses run by the University Teaching Methods Unit are much more structured, as are the courses run by the Department of Educational Administration.)

New programme

The central group may have had a slow start but eventually the programme as a whole involved considerable numbers of people. The central group, itself was small in the context of the university system although it proved enough to stretch the limited resources of the SDU grants. The SDU programme as a whole had a much wider impact. A total of 200 people attended the two conferences organized as part of the programme. Many more received publications and joined seminars. In addition, 113 people took part in the various workshops and study groups organized as part of the programme (not counting visiting speakers or observers).

There is one striking phenomenon about the SDU programme which craves some explanation; that is the markedly different responses of the academics and administrators. Administrators were more likely than academics to join the programme, administrators were the most regular attenders, and they persisted in their membership longer. Also, administrators made significantly greater tangible contributions.

The strong tendency for the programme to become dominated by administrators is an intriguing problem, especially when the very mixture of the two at meetings was the feature most frequently praised by administrators and academics alike. Different explanations may need to be sought as to why people first joined, why they remained or withdrew, and why they took more or less active part.

The reasons for the academics' tendency to drop from the programme are probably complex but one important element seems to be the view that most academics hold of their responsibilities within the university. One professor remarked: "I suppose the centre of an academic staff member's thought is (or should be) the development of knowledge in his subject coupled with the dissemination of knowledge to young people. He requires a framework which will enable him to carry out these activities but in general he is not too concerned with the detailed structure of the framework. It is only when it is unsatisfactory to him in a practical sense that he wishes to take much notice of it."

This does reveal a view opposed to that of the programme organizers. Although agreeing about the nature of the academic's general concern many of the developments being considered during the programme were either matters of academic policy (e.g. life-long education, women's studies) or expressly geared towards the more effective prosecution of academic policy (conduct of meetings, allocation of resources).

Taking a stance of reacting only when the present position becomes unsatisfactory, rather than looking ahead and planning for situations before they arise, seems a policy likely to lead to a breakdown of the university system (and possibly its relegation to a quiet backwater). It could also result in putting too much initiative in the hands of the administration whose purpose, after all, should be the pursuit of *academic* policies, not finding more efficient ways of supporting the status quo.

This view is supported by the very large response we have had for the workshops for senior staff. The 1975 workshop for heads of academic departments had almost twice as many applicants as places (despite a fee being charged whereas the central group meetings were free).

Another professor wrote: "The attitude (of a low commitment to the SDU programme) on the part of academics may well be partly a function of the comparatively (no doubt deliberately) unstructured nature of some sessions. Since the field of activity in these sessions is not likely to be of direct academic interest they perhaps felt that the 'sacrifice' of two or three days on such a conference required that their time be fully and intensively occupied—and hence an implied assumption that it should be carefully structured and fully programmed so as not to 'waste their valuable time'. An entirely understandable—and justifiable—attitude to bring to such a gathering".

Most central group members remarked how much they appreciated having time to discuss matters with their peers from other universities. The mixture of academics and administrators added to the value of the experience.

Twelve remarks on this theme were included in the 19 written assessments received. One senior administrator wrote: "The bringing together of administrative and academic staff is a brave but important experiment and should be developed at a lower level: senior lecturers and slightly more junior administrative staff also need this type of interaction".

In some of the exercises academics and administrators exchanged roles, examining issues or making decisions from an unfamiliar viewpoint was favourably reported upon.

There was a suggestion that the central group should attempt to keep its identity and further the work it had started by meeting on a regular if less frequent basis. Time and funds have not permitted such a meeting so far but the publication of this report might serve to create an opportune moment.

Crucial difference

As a department within the Institute of Education, the structure and purpose of the Department of Educational Administration are different in two crucial respects from those of the University Teaching Methods Unit. First, as a conventional academic department, its primary teaching responsibilities are the provision of courses leading to university qualifications, and the provision of supervision for students preparing for higher degrees by research in the field of educational administration. Secondly, its brief covers the whole of the educational system, not solely universities or even higher education.

However, the department has a close interest in the development of the kind of work reported here. Although its primary teaching responsibility is to provide for award bearing courses and research studies, it has since 1966 been involved in the provision of short courses and workshops of various kinds, first by means of a grant from the Calouste Gulbenkian Foundation for the development of teaching methods for the management development of educators and latterly through involvement in the SDU programme.

The department's continuing work in this field depends, in view of its other commitments, on the availability of special resources. It has (through the Institute and the university) put forward to the UGC a closely argued case for special finance to be made available for the development of non-award bearing post-experience courses for educational administrators, and for the development of appropriate teaching materials for these.

This proposal has unfortunately had to be left "lying on the table" because of the reallocation of the special funds originally car-marked for educational development to other purposes as a consequence of the economic situation. We are, however, convinced of the importance of making appropriate university based provision of this kind and earnestly hope that the proposal will be reconsidered at the earliest opportunity.

Responsibility

Ultimate responsibility for staff development must lie within the employing institutions, much of it at departmental level. However there is a strong supporting role to be played by centrally organized units (and a staff training college for higher education staff has much to commend it). The level of interest and sophistication in staff training and development is still comparatively low in many university departments and it seems unlikely that staff training will develop quickly enough to meet the challenge of the new economic and social climate without considerable centrally provided subsidies for training and staff development activities.

Three points need emphasis. The first is that although there is virtue in asking a staff development agency to "sell" its services to client departments it is unlikely that staff development activities would become quickly widespread throughout the universities system if departments were asked to pay the full economic cost of, say, centrally organized courses; especially if they were given the choice of spending the money in some other way. Staffing, other overheads and the development costs of new courses must necessarily be borne from some centrally provided fund. Only marginal costs may be passed on to the consumers.

The second point is that staff development is a way of improving not only the quality of teaching offered, but also the efficiency with which the universities are run. It follows that financial stringency on a national level results in a need for greater, not less, investment in properly conceived and well run university development programmes.

The third point is that the amount of money that the British universities invest in training their own staff is infinitesimal against comparable public institutions such as the Civil Service or the hospital service. The British Civil Service, for instance, provides some thousand places each year on ten week courses for principal grade civil servants alone and still 90 per cent of the Civil Service training is provided within departments rather than on courses. The hospital service provides management training for administrative, medical, scientific and technical staff. The number of places on management courses for nurses alone has been estimated at 12,000 per annum.

We should like to suggest 5 per cent of the total recurrent budget as an immediate target for financing staff development in universities. It seems likely that most British universities by contrast spend less than 25p per year for every student they have, on training their staff to teach. In fact the figures are unknown. We believe it true to say that no university of Great Britain has an accurate account of how much money it spends on training its staff.

Although, hopefully the present climate of opinion is bringing about rapid changes, at present many universities make no special financial provision for sending staff to courses (even some who mention in staff contracts the need for probationary staff to attend such courses).

Sometimes the fees for training courses come from the funds put aside to send people to specialist conferences. It is not unusual for a university to have a rationing scheme for such funds, which leaves a lecturer the choice between attending, say, the annual conference of a learned society or a staff training course. We would argue such arrangements are not in the best interests of the university let alone the staff concerned.

Recommendations

(1) Emphasis should clearly be put on staff taking ultimate responsibility for their own development. Initiatives must come in the main from departmental and institutional level supported (rather than led) by centrally organized activities.

(2) The "problem solving" approach as exemplified by the development programme "managing change", provides a model for inter-university cooperation and institutionally based work supported by a central agency. Further work of this kind should be encouraged.

(3) Departmentally based staff development programmes which involve all the staff of a department should be encouraged, and a body of experience, about such schemes built up and published. Such programmes should consist of a thoughtful combination of on-and-off-the-job experience some organized within an institution and some organized by outside agencies. Departments require some way of composing and monitoring such a mixed programme.

(4) Programmes which have some of the characteristics of the SDU programme should be easier to start in future partly because we and others can learn from the experience and because some of the materials now produced would overcome the problem of apparent lack of activity at the beginning. Other programme organizers should feel free to take and adapt any of the procedures and materials we have developed.

(5) Although it will always be appropriate to provide training exclusively designed for either academics or administrators there are areas where joint activities carry advantages particularly at senior level.

(6) The Committee of Principals and Vice-Chancellors Administrative Training Committee and the Co-ordinating Committee for Training University Teachers should seek a very close working relationship perhaps with the establishment of a joint committee.

(7) There would be value in continuing some regular forum for senior academic and administrative staff concerned with innovation and staff development rather on the lines of the SDU central group.

(8) There will be a continuing need for a central service to support and encourage initiatives in university staff development. The service should include courses which for various reasons cannot be run at institutional level, a resources centre containing training materials and reference materials for staff development, and consultancy. There are advantages in associating such service work with educational research.

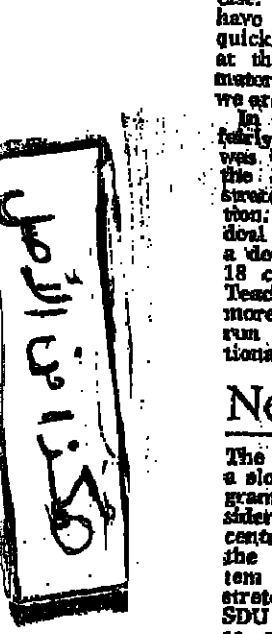
(9) Collaborative ventures such as that between the Department of Educational Administration and the University Teaching Methods Unit should be encouraged.

(10) There should be sustained in-service training courses available to academic staff and a non-award-bearing post-experience course for university administrators. Funds should be made available for both.

(11) At the earliest possible time centrally provided subsidies should be given to support and encourage rapid development of a more sophisticated approach to staff development and organization development within universities. In addition to the developments already mentioned there should be included some work on the allocation of resources and the distribution of facilities. The problems and subsequent need for inquiry are evidently greater in the federal universities.

(12) Universities should adopt a policy of spending a proportion of their recurrent income on staff development. The figure of 5 per cent is suggested as an immediate target.

The Changing University: A Report on Staff Development in Universities. NFER Publishing Company, Darville House, 2 Oxford Road East, Windsor SL4 1DF, £11.75.



White man's burden

A key civil rights case begins before the US Supreme Court next week. At issue is the legality of excluding white students from college places in favour of less qualified "minority" applicants. Michael Binyon, North American correspondent, reports

The Bakke case—the suit before the Supreme Court challenging reverse discrimination in university admissions—has become a major political issue in the past few weeks. The Carter Administration has seemed to lean first one way and then the other in its attempts to articulate its position on race, quotas and affirmative action.

The Government has now finally submitted its brief to the court, and it comes down firmly on the side of all special programmes to help minorities overcome the effects of past discrimination. The brief says unequivocally that race can and should be a factor in determining university admissions.

The brief, published by the Justice Department, has been warmly greeted by black leaders and civil rights activists, and ends several weeks' intense lobbying and serious warnings of the political consequences if the Government had stuck by an earlier draft which sharply attacked racial quotas.

The Government position, considered of great importance in influencing the court's ruling, has changed three times in the past month, an indication of the complexity and importance of the issues raised by the case. The final brief sidesteps the issue by refusing to come down on the side of either *Allan Bakke*, the plaintiff, or the *University* of California, which Bakke said unconstitutionally discriminated against him when it admitted 16 less qualified black applicants to the Davis Medical School, while turning him down (*THES*, July 22).

The Government's brief says almost nothing about racial quotas, but says numerical goals could still be set in all affirmative action programmes. Clearly trying to take some of the political heat out of the case, it suggests the Supreme Court interpret the case very narrowly, sending it back to the Lower Court in California for review. The Government argues the California court made a wrong legal judgment, and should not have upheld Bakke's claim against the university.

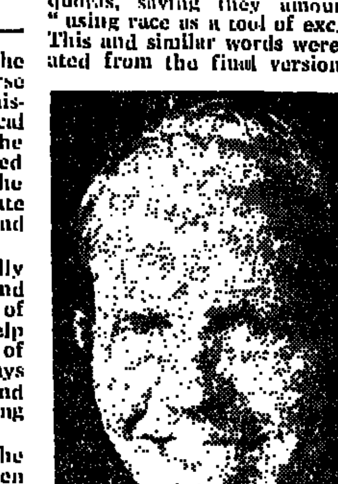
All this is a considerable turnabout from the position of only three weeks ago, which itself seemed to contradict the original indications that the Government would support the university.

A draft brief drawn up by Mr Wade McCree, the Solicitor-General, himself a black, argued firmly against the use of race as a criterion for admission and was circulated to key Government members for discussion. That drew an outraged protest from black Congressional leaders, and split the Cabinet.

In an almost unprecedented action President Carter intervened personally, and affirmed his abhorrence of racial quotas while strongly endorsing affirmative action programmes. There was talk of acrimonious cabinet arguments, with Andrew Young and Patricia Harris, both blacks, and Joseph Califano, Secretary for Health, Education and Welfare, arguing strongly that such a brief would fatally weaken the Government's ability to enforce affirmative action programmes.

The main issue, the final brief says, is not whether race may be taken into account, but how. "We believe it is permissible to make minority-sensitive decisions, but that it is necessary to address as well questions concerning how race was used, and for what reasons". The document goes on: "The findings with respect to these latter, critical questions are insufficient to allow the court to address them".

In its earlier version, the Justice Department explicitly rejected quotas, saying they amounted to "using race as a tool of exclusion". This and similar words were eliminated from the final version.



Alan Bakke: test case

The Supreme Court will hear oral arguments on October 12, but may not announce its decision for some months after that. The issue is widely seen as being the most crucial civil rights case before the Supreme Court for 20 years.

More testimony from interested parties has been filed than in any other Supreme Court case—58 briefs, representing more than 160 organizations have been submitted. About two thirds of them, mainly from universities and civil rights organizations, support the University of California. The supporters of Bakke are mainly business organizations, Jewish groups and other ethnic bodies.

By playing down the importance of the actual case itself, the Government is hoping to limit the application of whatever ruling the Supreme Court makes, and thus preserve affirmative action programmes as they are. Mr Griffin Bell, the Attorney General, said the administration was not planning any stronger measures over affirmative action, but wanted to protect what there now was.

At the heart of the argument, however, is the difference between "numerical goals" and "quotas" for minority admissions. And the Carter Administration has deliberately decided to stay out of this controversy. Mr Bell said he was opposed to "rigid exclusionary quotas" and declared that there was "a line between goals and quotas, and, when you cross it, we would oppose the quotas".

The difficulty is that the line is often hazy, and universities have been trying for several years to work out the real difference. The Government brief simply does not say whether qualified whites will have to be discriminated against in order to make room for minority students.

Leader, page 10

New moves against defaulters

The job of collecting defaulted Federally-insured student loans is to be placed in the hands of a private collection organization, the US Office of Education has announced.

Proposals are now being solicited from bodies which have had wide experience in collecting consumer loans and in tracing the whereabouts of defaulters. Last year Congress authorized the Office of Education to use such means to recover the sharply increasing sum of money lost through the disappearance or deliberate bankruptcy of students unwilling to repay the money borrowed to finance their college education.

The contractor will receive no Government funds. Instead, it will be paid a percentage of the payments collected. It can use only its own staff to get back the money, not hired collectors. The organization's efforts will supplement those of 106 Government collectors now working from regional offices around the country.

Republic of Ireland

Working class numbers remain low

from Paul McGill

DUBLIN

Very few students in Trinity College, Dublin, come from lower working-class backgrounds despite a massive expansion in secondary education in the last decade and the introduction of a limited student grants' scheme in 1968.

An unpublished study by the college shows that only eight of the 1,032 students who enrolled for full-time first degree courses last year were from the three social groups which include farm workers and fishermen and semi-skilled and unskilled manual workers. Together, these added up to less than 1 per cent of the intake.

By contrast, over 70 per cent came from the three groups covering employers and managers (307), higher professional staff (253) and salaried employees (168). Farmers, farmers' relatives and farm managers accounted for another 106 students, or 10 per cent of entrants. These high social groups predominated especially in professional subjects like medicine, engineering and law.

The problem of working class representation in higher education has been made the more difficult in the Republic of Ireland by the inadequacy of student financing. The maximum rates of grant are £140 a year for students living at home and £350 for those living away. These are subject to a severe means test if parental income exceeds £2,625.

Living costs in Dublin are high and first year fees in 1976 ranged from £200 to £250. The intake figures show that the traditional notion of Trinity as a "gentlemen's college", combined with financial difficulties, have served to deter all but a handful of lower working class children.

● Meanwhile, a study by the State-backed Institute for Industrial Research and Standards suggests that one group of people is probably better off staying away from university. Thirty-eight successful entrepreneurs, who have built up companies employing over 3,500 workers and turnovers aggregating more than £40m a year, are shown to have low levels of formal education and humble social origins.

In a book entitled *Man of Enterprise*, published last month, the institute reveals that 11 of the entrepreneurs had primary school education only and that three of the six who went to university had been working before entering college.

West Germany

Teachers worst hit in big graduate jobless increase

by Günther Kloss

Graduate unemployment in the Federal Republic rose sharply between May 1976 and May 1977, according to the Federal Employment Office in Nuremburg. This May 24,700 unemployed persons had a university degree, an increase of 34 per cent over the previous year, and 15,100 had a diploma from an advanced vocational college, a rise of 4.7 per cent.

The career hardest hit was teaching, where the increase amounted to 3,900 or 120 per cent. More than 7,000 teachers were unemployed in May. Social workers, who are mostly trained in advanced vocational colleges, were also badly affected, with 69.6 per cent more (1,700) looking for jobs.

Among graduates and "academics" in general the rise of unemployment over the 12 months was steepest among those seeking their first jobs: 55.9 per cent for university graduates (total in May 1977 9,700) and 53.1 per cent for holders of college diplomas (total 5,100). Yet the survey reveals that almost 90 per cent of this group found a job within one year. In general, too, the average period of unemployment of the total graduate group was shorter than that of all unemployed taken together.

Swedish Budget proposals

Priority sought for short courses and research

from Mike Duckenfield

STOCKHOLM

More shorter courses and an increased emphasis on applied research are the two main features of the National Board of Universities and Colleges' budget requests for the year beginning next July, the second after the implementation of the U 68 reforms.

The board, which administers virtually all full-time post-secondary learning, wants spending to rise 9 per cent to 3,002m Skr (£353m). This compares with increases of 12 per cent this year and 20.5 per cent last year. However, a supplementary request is expected later, when this autumn's student intake to courses with unrestricted entry is fully known.

The expansion of shorter courses, planned locally to meet regional needs and connected to working life, is seen as vital in making higher education opportunities recurrent. In line with this summer's reform guidelines, capacity on the courses will increase by 10 per cent annually over the next few years.

Intake to these courses is expected to be in the region of 21,000 students this year and, to maintain growth, the board wants spending to rise 62.1 per cent to 186m Skr. Provision, currently concentrated in the natural an dsocial sciences and humanities, will be diversified into the welfare an dtechnology sectors.

Entry limits for full-time, full-length traditional degree studies are, as yet, provisional pending a report on demand for places this autumn. However, the board foresees numbers increasing by about 5 per cent to 41,700.

All such studies are now divided into five vocational sectors with most admissions geared towards anticipated manpower needs. For 1978-79, there would be above average increases in entry to both culture and information and welfare sectors (10 per cent and 9.4 per cent). The first o fthese caters for, among other, future journalists, librarians an dtranslators and the second for doctors and dentists. Spending for both sectors would rise b yabout 9.5 per cent.

Teacher training spending would increase 13 per cent but admissions only about 4 per cent. This reflects theswitch away fro mtraining staff to teach the declining number of 7-16 year olds in compulsory schooling in favour of those fo rursery and infant schools.

The budget also recommends the expansion of training places for specialist teachers, both in the final three years of comprehensive schooling and in the upper secondary schools, which cater for 16 to 19-year-olds. Training places for music teachers will rise 34 per cent and those for domestic science and industry and crafts subjects by 10 per cent and 20 per cent.

The board plans least growth in the technologies, with only a 1.5 per cent rise in both spending and the number of new students. However, work is to go ahead on developing the vocational-technical colleges started in 1975.

These offer higher training for workers with at least four years' experience in one of seven key industries. Courses last 18 months with student intake being taken consecutively. Most of the 12 colleges now have their second generation of students and admissions have risen to 510.

Regarding research, the board recommends major increases in spending on the humanities (up 32.4 per cent) and social sciences (up 24 per cent). This is to offset previous growth in technological, scientific and medical research which will now be held back.

Overall research spending in higher institutions would increase by 16 per cent to 731.6m Skr, according to the budget, and the number of postgraduate students held steady at about 12,500—the same figure as since 1973. Priority will be given to work on consumer studies, energy sources and the working environment.

The board's request will now be considered by the Government prior to the announcement of the national annual budget early next year.

French Budget proposals

Jobs and promotions to be held in check

from Guy Neave

PARIS

Little respite for the hard-pressed universities is contained in the 1978 budget for higher education. The Bill, to bt debated later thisyear in Parliament, provides Fr11,500m (£1,352m) for all sectors of higher education—some 8.8 per cent up on last year. However, with inflation running at around 12 per cent, this represents a cut of some 4 pe rcent in real terms over last year.

Among the hardest-hit areas will be capital equipment and staff recruitment. Leaving aside research allocations capital equipment expenditure will be pared back to Fr300m. This compares with Fr350m for the previous year. Particularly affected are building progammes fo teaching hospitals.

Justifying these hefty cuts the Ministry of Finance pointed out that home student numbers over the past three years have steadily been falling. Estimates for the coming year reckon the number of French entrants to higher education will drop by a further 0.4 per cent.

In fact, the overall growth in enrolments since 1974 has ben kept up only by a massive influx of foreign and overseas undergraduates, principally from countries of the ex-French Commonwealth. Th esituatio nis such that science faculties are faced with around 90,000 vacancies this year.

Recruitment of teaching staff will similarly be affected, though not service personnel. The coming year will see only 91 tenured posts created, most of them already earmarked for medical faculties and for lecturers teaching the new "second cycle" degrees.

Promotion prospects seem equally dim. Over the past three years retirements have been under 150 a year and are likely to fall to around 100 annually at least up to 1980.

At present there are thought to be some 600 *maîtres assistants* (equivalent to a British university senior lecturer) with the necessary experience and qualifications to merit promotion to prinipal lecturer-reader or to professorial status. Only one-third will in fact be promoted, most of them on a personal basis. This means that if the holder moves elsewhere the post is not kept within his department.

At the lower end of the scale some 450 *assistants* (*lecturers*) will be made *maîtres assistants*. Last May Mme Alice Saunier-Seité, Secretary of State for Higher Education, made it clear that preferential treatment would be given to two groups. The first are those teaching in the two-year technological institutes (IUTs), the second those expatriates returning from overseas voluntary service in Third World countries.

As a sweetener to an otherwise bitter pill a 20 per cent increase is to be made to the hourly rates for part-time lecturers from this month. Part-time rates have not been increased since 1971.

The research budget will maintain its 1977 level—an achievement in itself since fears were considerable last year that it would be severely pruned.

TIMES PAST TO-DAY AND TO-MORROW THE TIMES

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Critics in the Commons

A good measure of how much higher education, and in particular the universities, have slipped in popular esteem is contained in the ninth report of the House of Commons Public Accounts Committee which was published last week. Less than 14 years after the Robbins report with its recipe for optimistic expansion was received enthusiastically by both parties in Parliament, the universities are lumped together with maladministration and fraud in social security as a suitable cause for Parliamentary concern.

The comments of Mr Du Cann and his colleagues on university costs are unsympathetic and the tone of their report is generally hostile. Their explicit conclusion is that universities far from being hard done by are very lucky to have been able to maintain their expenditure per student at 1971-72 levels in a time of great economic difficulty. Their implicit one is that even these levels may be too generous to meet what they call "essential present-day needs". The overall impression created by the committee is that universities are some kind of gigantic institutional Concorde, indubitably a heavy drain on public resources and only a dubious benefit to the community.

The easy temptation is to reject out of hand this apparent ignorance and prejudice and complacently to assume that the report can be safely ignored. But that would not be wise because Members of Parliament, whatever their individual merits, are usually very efficient conductors of grass-roots opinion. That, after all, is an important part of their job. So the way that universities are perceived by a House of Commons committee is probably a not altogether inaccurate reflection of how they are regarded by the ordinary voter and taxpayer. The same crude but effective public image is likely to influence the decisions made by Ministers. Secondly, of course, the comments of the Public Accounts Committee must be taken seriously because it is through Parliament that universities are ultimately accountable for the public money they receive.

Also it is important for the universities to distinguish between the detailed comments made by the committee, many of which are relevant and challenging, and the overall tone of prejudice that seems to suffuse their report. For example, on the present balance between students living at home and in residences the committee may be right to suggest that the justification for this should be examined in a more rigorous way than in the past. Again, on student residences financed by commercial loans they are probably right to doubt whether any money is really saved in the long run—although, of course, student residences are provided in the short run which is a not negligible achievement. Universities must sharpen up their own arguments if they are adequately to defend the principle of largely residential institutions with an important "social fringe" in an age of approaching mass higher education.

More urgent, however, is the need to answer the committee's apparent judgment that universities are, if anything, too generously supported from public funds. Here they will probably find that the traditionally private and privileged channels of communication to Government have become clogged and can no longer be navigated with the same success as in the past. Instead universities must adopt a public and more popular defence of their value meeting prejudice head on with tough arguments.

The private lobbying of the University Grants Committee must be complemented by the public lobbying of—who? That is the difficulty. Universities have no collective voice in the public arena. The vice-chancellors shy away from such a role; the Association of University Teachers is too absorbed in collective bargaining. Yet a louder and more effective voice for universities must be found if the next time the Public Accounts Committee turns its attention to universities it is to be encouraged to be more sympathetic.

Reverse discrimination on trial

Is it right to use reverse discrimination to overcome the effects of injustices done to racial minorities in the past? Put in this way, the fundamental issue of the Bakke case now before the United States Supreme Court (page nine) looks agonizingly difficult, if not completely irresolvable.

It becomes slightly simpler, and easier to judge, if you reduce it to less grand terms and ask: should the academic entry requirements be lower for applicants from deprived social and racial backgrounds than for middle-class whites from good schools?

The second question is more relevant to the United Kingdom, where there is little feeling of a historical injustice committed over many generations by the white majority. Most reasonable admissions officers in British universities are trying to recruit students with the greatest ability to do well on their courses, and many see that it is necessary to have a go at stripping away the effects of schooling, good or bad, to discover the true quality beneath.

Even this limited form of "affirmative action", where you attempt to discount the effects of racial background in order to pick the best students for your course, could be threatened if the Supreme Court rules in favour of Allan Bakke. Then American universities might shelter from an expected barrage of lawsuits by sticking rigidly to "objective" admissions criteria such as grade averages and scholastic aptitude tests. (To many Britons, schools and colleges in the United States seem obsessed with numerical measurements of academic attainment; to see a grade average of 3.51, say, or aptitude test score of 659 quoted publicly seem absurdly precise to those who are used to As, Bs and Cs.

Such an outcome could indeed be seen as a blow to academic freedom. Universities would have freedom to select the best or most interesting mix of students for a particular course, rather than the best qualified on paper. Medical schools would be inhibited from going beyond academic excellence and trying to choose socially serious, caring men and women who are likely to make good doctors—the sort of people many Americans fail to recognise among their medical profession.

But the philosophy of American affirmative action, also exists in a stronger form, whose aim is to right injustices by giving preference to minority candidates who are not expected to do as well, at least over the time scale of one university course, as the whites whose places they take. The full benefits of this form of reverse discrimination will be felt in future generations.

Here it is virtually impossible for the British observer to express a clear view. But we can express admiration for the bold way in which many universities and colleges in the United States have become involved in the implementation of social policies—policies that are profoundly unpopular with the American people, to judge from opinion polls; Gallup recently found only 10 per cent in favour of preferential treatment for women and blacks, with 83 per cent against.

LETTERS TO THE EDITOR

NELP dispute

Sir,—The decision (*TIMES*, September 30) of Mr Justice Lawson compelling the North East London Polytechnic to continue its two-year social work training course which the chairman (Alderman Edwards) and the director (Dr Brosan) of NELP had decided to close down has several wider implications.

As is generally known, a dispute arose because the relevant admissions committee of NELP, consisting of social work tutors and an outside official, rejected an applicant who was an employee of Newham borough, one of the three London boroughs which act as the constituent authorities for NELP, operating as a Joint Education Committee (JEC).

On July 15, 1977, the JEC passed a resolution so extraordinary in its terms that it must be set out in full. It ran:

"RESOLVED That:—subject to the Articles of Government:
(1) No students be accepted on to the first year of the NELP two-year full-time Certificate of Qualification in Social Work course for the academic year 1977/78.
(2) The officers take action to secure, as soon as practicable, the termination of the contracts of employment of up to 50 per cent of the full-time and, as appropriate, part-time teaching staff of NELP who would otherwise have been directly involved in the staffing of the first and second year intakes of the two-year full-time CQSW course.
(3) The officers secure the termination, not later than August 31, 1978, of the contracts of employment of the remainder of the full-time and part-time teaching staff of NELP directly involved in the staffing of the NELP two-year full-time CQSW course.
(4) The chairman of the Joint Education Committee be authorized to rescind paragraphs (1), (2), and (3) of the above resolution, should he be satisfied that NELP is prepared to admit the Newham Authority employee named in the report of the director, on to a two-year full-time CQSW course at NELP commencing in the academic year 1977/78.

Now the JEC have no power either to close courses or to dismiss staff. To overcome this little local difficulty, Edwards and Brosan's deputy purported to adopt the JEC resolution in the name of, respectively, the governors and the academic board of NELP. This was "chairman's action" with a novelty as well as a vengeance. And of course it effectively excluded the teaching staff of NELP from decision-making.

By this time (August, 1977) some 30 new students had been offered and had accepted places on the course (which has a quota of 45 places). No further offers were made and the 30 were told that there was a real possibility that there would be no course. In other words, NELP proposed to break their contract with the accepted students.

The Central Council for Education and Training in Social Work then weighed in to point out to the NELP administrators that the Newham employee could not be admitted if deemed unsuitable and that this rule had the authority of the Privy Council. Undeterred by this, or anything else, the director of NELP announced the closure of the course.

So two of the accepted students successfully applied to the High Court to have the course reinstated. Mr Justice Lawson made clear that in his view the JEC and the NELP administrators were acting illegally and improperly.

So, however incredible it may seem, the JEC were willing to seek to close down a course, to dismiss staff, and to brag about breaches of contract with students simply to impose their will in a specific instance on a matter of academic assessment, and to override the professional judgment of the social work tutors in order to further the application of one of the JEC's employees. And in this endeavour they were supported by the two people whom one would have expected to uphold that judgment: the chairman of the governors and the director of the polytechnic.

In the present debate on the suitability of local authorities to be the paymasters of polytechnics, this remarkable story carries an obvious indication. As it does about the extraordinary way in which the bureaucratic balance within some educational institutions.

Yours truly,
JOHN GRIFFITH,
Honorary secretary,
Council for Academic Freedom and Democracy,
186 King's Cross Road,
London, WC1.

Anthology aims

Sir,—Mr Spearing's thoughtful and very favourable review (*TIMES*, September 9) of *English Verse 1300-1500* encourages me to try to answer his questions about the purpose of the Longman Annotated Anthologies.

It is hoped that the series may prove useful to several groups of readers: undergraduate students who are not complete beginners; more advanced readers who wish an introduction to a particular period of literature that happens to be unfamiliar to them; and mature students.

Period anthologies usually offer little or no annotation (assuming perhaps that only the learned wish to read a variety of authors); whereas course readers tend to write down to their readers. The different idea of the Longman series is that those who use anthologies may need a great deal of help, without being slow witted.

A further purpose, maybe of equal importance, is to annotate a little of the fine poetry that lies outside the rather narrow range of poets at present fully edited. In this way the anthologies form a natural extension of the Longman Annotated English Poets. The limiting effect of our present canon is probably greater than we realize. But there may be readers—even advanced readers—who will find a use for samples of editorial and critical commentary extending beyond these fake limits.

ALASTAIR FOWLER,
General Editor,
Longman Annotated Anthologies,
Regius Professor of Rhetoric and English Literature,
Edinburgh University.

Fircroft and unions

Sir,—You carried an article on Fircroft College in which it was suggested (*TIMES*, September 30) that Old Fircrofters would be suspicious if trade unionists were to have a majority on the governing board of the college in the future.

Can I, as an Old Fircrofter, who returned after college to work as a postman, put a different point of view? I for one am not frightened of having trade unionists on the Board of governors, or of opening the college primarily to trade unionists. Why should they have a narrowing effect on the college? Why should people assume that trade unionists want to be kept in blinkers?

A Bill is going through Parliament which will allow for a two-year experiment of industrial democracy within the Post Office, with participation at national, regional and local level, to start on January 1, 1978.

The trade unions urgently need shop floor members who can think and judge for themselves—not just about wages and working conditions but, since Bullock, about management issues and their society as a whole. The new Fircroft can educate workers to do just this.

I would say that the best chance of saving Fircroft for workers and for liberal studies is to clasp the hand of the trade unions. They offer us as workers the direct means of expressing our democratic will. They are the only ones who can ensure that the college remains true to its original purposes and does not become a stepladder into the professions.

Now is the time for the many trade unionists who have gone through Fircroft to speak out in favour of keeping the college true to the traditions of George Cadbury and the pioneers.

Yours sincerely,
GORDON BIGGS,
Copse Close,
Northfield, Birmingham.

Plight of libraries

Sir,—James Thompson is gloomy in his comments on the seriousness of the present state of university libraries (17 September 30) or too harsh in censure of the universities for failing to spend enough, or too wisely, in his conian in his remedy of ear-marked grant.

But he is too simple. In the place, his view that the grant should cover every form of library expenditure ignores the moral of the depressing history, that books and periodicals are vulnerable to the petition for immediately realizable cash from *any* quarter. It is not so much Mr Thompson's idea of a "non-optional arrangement" as a phrase for which politicians, trade unionists and bureaucrats will have where will be grateful—as for the mention that one should be made to provide for a second-order priority service that underlines the difficulties.

Libraries, like other institutions, play host nowadays to advancing technology and mushrooming ancillary services which, useful as they may be, are difficult to control. Books and periodicals, which are not purchased and stored, are probably gone for ever, and the pressure to economize on them will increase inside libraries as well as outside as the technology becomes more expensive.

Deficiencies in staff, equipment and service are serious but in relation to present need, but they can be remedied in better times. There is no reason why librarians and library committees should not be subjected to the same discipline of procedures and competing for resources as other departments of the university which in these respects have analogous, though not as important, requirements.

Hence Thompson's pessimism repeats the error which he rightly castigates in others, by failing to insist that it is in its primary function of collecting books, and in due alone, that the library is unique and has unique protection.

Secondly, if the failure of universities has been to recognise that the first duty of their libraries is now to the present but to the future, they can hardly be lugged in to turn this help, especially in the wake of the Atkinson report, to the government which has created the shortage pressures that the universities have failed to resist.

If our libraries are to survive in any serious sense they will have to find some form of trusteeship, longer-sighted and more courageous than any that they have now. Extra marked grants for the purchase of stock might provide a temporary respite, and even that is desperately needed, but unless the respite is used to devise a more permanent and durable source of library finance it would not be long before the remedy had become worse than the disease.

Yours sincerely,
R. I. MOORE,
Department of history,
Sheffield University.

Examining boards

Sir,—It would be interesting to know who in the National Union of Students commented (*TIMES*, September 23) on "the all-pervasive influence of the university over the school curriculum". Although all but two boards were established by and have been at times subjected to the universities, the dominant influence in the GCE examination boards is that of school teachers—and quite rightly.

As to the curriculum, the universities have increasingly to respond to changes or try to compensate for them, rather than having much influence: witness the obsolescence of Latin.

The NUS gibe is yet another blow from our own side which those of us engaged in the battle against public ignorance of educational matters could well have spared.

Yours faithfully,
H. E. BELL,
Senior assistant registrar,
Reading University.

more letters page

Letters for publication should arrive by Tuesday morning at the latest. They should be as short as possible and the editor reserves the right to cut or amend them if necessary.

Classified Advertisements Index

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Universities
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Colleges of Education
Colleges of Further Education
Colleges and Institutes of Higher Education
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To teach English to university students, especially those who are training to become teachers and to supervise postgraduate students and the language laboratory Degree in English or Modern Languages and MA in English Language or Linguistics. Substantial experience of teacher training for secondary schools and ability to use a language laboratory essential. Experience of examinations work, CCTV and ESP desirable.
Salary: £5,210-£7,054 plus 10 per cent inducement allowance.
Benefits: personal and children's allowances; free furnished accommodation; medical scheme; employer's portion of superannuation. 2 year contract
77 TU 142

TV SPECIALIST
(India)

Department of Radio, Television and Cinematography, The Central Institute of English and Foreign Languages Hyderabad.
Experience in producing and directing educational films and television programmes essential; some teaching experience, preferably in ELT, desirable.
Salary: £5,210-£7,054 plus 10 per cent inducement allowance.
Benefits: free furnished accommodation; personal and children's allowances; medical scheme; employer's portion of superannuation; 2 year contract.
77 PO 31

LECTURER IN LINGUISTICS AND TEFL
(Burma)

Institute of Education, Rangoon.
Degree, postgraduate qualification in Linguistics, Applied Linguistics or TEFL and previous overseas experience essential.
Salary: £5,210-£7,054 plus 10 per cent inducement allowance.
Benefits: free furnished accommodation; personal and children's allowances; medical scheme; employer's portion of superannuation; 2 year contract.
77 PU 146

COMMUNICATION SKILLS IN ENGLISH PROGRAMME
KING ABDUL AZIZ UNIVERSITY, JEDDAH
(Saudi Arabia)

This programme has been developed over the last 2 years with British Council professional support and has involved the production of specialised teaching materials for the implementation of English medium courses in the Faculties of Engineering and medicine.
Required for January, 1978, or earlier.
Teachers of English with Science Background.
Teachers of Science with interest in English Language.
Graduates, men only, with a postgraduate qualification in TEFL and experience or interest in Teaching English for science and technology. In the case of science graduates the TEFL qualification may be waived.
Salary: £7,082-£12,852 p.a.
Benefits: free furnished accommodation is provided but single candidates will have to share; 60 days annual leave; 1 year contracts, probably renewable.
77 AU 64-93

SPECIALIST IN TESTS AND EXAMINATIONS
(India)

Regional Institute of English, South India Bangalore.
Relevant MA degree and experience of testing and examinations work essential, PhD and research experience desirable.
Salary: £5,210-£7,054 plus 10 per cent inducement allowance.
Benefits: personal and children's allowances; free furnished accommodation; medical scheme; employer's portion of superannuation; 2 year contract.
76 TO 145

DIRECTOR, INSTITUTO CULTURAL
(Uruguay)

Instituto Cultural Anglo-Uruguayo, Montevideo
Required from mid-February, 1978. Qualifications: degree with PGCE, MA in Applied Linguistics, or one year postgraduate TEFL qualification desirable; 5 years' relevant experience.
Salary: £5,210-£7,054 p.a.
Benefits: overseas and children's allowances; medical scheme; 2 or 3 years contract, renewable.
77 PO 164

Return fares are paid. Local contracts are guaranteed by the British Council. Please write briefly stating qualifications and length of appropriate experience, quoting relevant reference number and title of post, for further details and application form to The British Council (Appointments), 65 Davies Street, London W1Y 2AA.

THE BRITISH COUNCIL

UNIVERSITY OF AUCKLAND
New Zealand

Applications are invited for the following full-time teaching positions. Conditions of Appointment and Method of Application are available from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF. Applications will be accepted at any time up to 31 October, 1977.

Commencing salary within the appropriate scale will be determined according to qualifications and experience. At present, salaries are supplemented by a cost-of-living allowance of NZ$386 per annum.

Lecturer: NZ$9,074 to $12,178.

Senior Lecturer: NZ$12,817 to $14,637. In exceptional cases the Council may extend this scale to $16,634.

EDUCATION—Lectureship:
This post is within the Centre for Continuing Education. Sympathy with the objectives of continuing education and insights into the educational needs of mature students are particularly desirable. Experience in adult education and a good knowledge of the New Zealand education system, particularly of the University, would be an advantage.
Candidates should have a good degree in education preferably with elements of educational psychology, methods of educational testing and measurement including surveys and statistics; and proven research ability in one or more of these fields. Duties would include the promotion and organisation of courses, seminars and conferences, and teaching and research in the general field of education.

CIVIL ENGINEERING—Lectureship:
Teaching and research laboratories are operated in fluid mechanics, soil and rock mechanics, civil engineering materials, public health engineering, and structures (including a test floor). Applicants should be well qualified in Civil Engineering either with an honours degree at bachelor level or with postgraduate qualifications in one of the subject areas: Structural Mechanics, Mechanics and Properties of Materials. Although not essential, professional civil engineering experience would be a considerable advantage.

MECHANICAL ENGINEERING—Lectureship:
Current research activities are in the fields of: mechanics of deformable solids; production technology; industrial aerodynamics; turbulent boundary layer flows; two-phase flows; energy conversion and utilisation; wind power; blood flow studies; biomechanics; industrial engineering.
Applicants should have a strong academic background in Engineering, preferably with education at the postgraduate level. Although research, industrial and teaching experience is regarded as important, it is not essential that applicants should have experience in all three. It is hoped to recruit a person who is qualified in one of the following fields: Mechanics of Materials; Manufacturing Engineering; Theory of Machines.

FRENCH—Senior Lectureship or Lectureship:
Candidates should have special qualifications and experience in teaching French at university level. Although this is essentially a language teaching post, additional qualifications in other fields such as applied linguistics, social history or specific literary areas should be stated. Research interests should also be specified.

OPTOMETRY—Lectureship:
Applicants should have a higher degree and an optometric qualification that would allow them to be registered as optometrists in New Zealand. Special interests in optics or physiological optics would be an advantage although applicants with other interests would be considered. Applicants should be willing to undertake clinical supervision in addition to teaching.

POLITICAL STUDIES—Lectureship:
The Department is interested in appointing a Lecturer in either of the following or, preferably, a combination of both: the political, social and structural aspects of broadcasting systems and mass communications in general; the history of twentieth century political thought. Applicants should state their field or fields of interest, together with any subsidiary fields in which they are able to teach.

MURDOCH UNIVERSITY
Perth, Western Australia
VICE-CHANCELLORSHIP

The Senate of Murdoch University is seeking to appoint a successor to its first Vice-Chancellor, Professor S. Grieve, who is resigning at the end of this year to take up another appointment. The Chancellor, the Hon. Mr Justice J. L. G. Wickham, would be pleased to receive confidential enquiries from interested persons with appropriate experience and qualifications, and to hear from others who may be prepared to suggest the names of persons who might be considered. Correspondence should be directed to him under personal and confidential cover at Murdoch University, Murdoch, Western Australia, 6150.

Formal applications should reach the Chancellor not later than November 30, 1977.

THE UNIVERSITY OF THE WEST INDIES, TRINIDAD

Applications are invited for the post of

PROFESSOR of CHEMISTRY

Salary scale, £1977-76, Professor, TT$35,760 to TT$49,440 p.a. (£1 sterling equals TT$4.16). Fsdu. Unfurnished accommodation is available at 10 per cent or furnished at 12½ per cent or housing allowance of 20 per cent of pensionable salary. Up to five full economy passages on appointment and on normal termination. Study and Travel Grant. Detailed application naming three (3) referees to Secretary, UWI, St. Augustine, Trinidad, as soon as possible. Details of post sent to all applicants.

Universities continued

DEAKIN UNIVERSITY GEELONG, AUSTRALIA

Deakin University was incorporated in 1974 and on 1 April 1977 absorbed most of the functions of the Gordon Institute of Technology and the State College of Victoria at Geelong. In 1978 the University will have approximately 3,500 students including 1,000 in off-campus studies. The main campus of the University is on an 80 hectare site at Waurn Ponds, 13 kilometres south-west of Geelong.

The University is seeking to fill the following posts.

School of Commerce

Planning Dean (Ref. 77/19/0)

The University is anxious to extend and diversify its academic interests and this applies particularly to the School of Commerce. The task of Planning Dean will be to expand the existing programme which already offers major sequences of study in accountancy, administration, economics, data processing and legal studies, and to recommend new major sequences which are appropriate. In addition to these undergraduate programmes it is envisaged that the Planning Dean will develop postgraduate and extension courses. The appointee will be a member of the Academic Planning Board and will be expected to play a major role in developing undergraduate and postgraduate teaching in the appropriate fields, fostering interdisciplinary studies, assisting in developing off-campus (external) studies programmes and implementing programmes of research. Teaching and research programmes should reflect the University's strong wish to involve itself with the needs of business, government and institutions.

The appointee will serve as Planning Dean for a period of not less than three years in the first instance. Subsequent appointment to the Deanship will be by an election from senior staff members in the School (including the Planning Dean) for three year terms. The Planning Dean will hold permanent tenure as a Professor of the University from the date of his appointment.

Planning Deans receive an allowance for expenses of office. Applicants should be either persons with wide business experience who can demonstrate an interest in management education or academics who preferably have had significant experience in business and/or public administration.

Closing date for this position is 12th December 1977.

School of Education

In 1978 there will be 700 equivalent full time undergraduate student of whom 150 will be off-campus registrations. The academic staff established will be 54.

Senior Lecturer in Curriculum Studies (Ref. 77/1/10)

Applications for the above post are invited from candidates possessing a higher degree in education and research interests in curriculum design, development, evaluation and innovation.

Cognitive Psychology Research and Development Group Positions

Applications for the following posts are invited from candidates with a higher degree in psychology.

Lecturer in Experimental Child Psychology (Ref. 77/1/11)

Applicants should have research interests in the experimental study of cognitive development.

Lecturer in Cognitive Psychology (Ref. 77/1/12)

Applicants should have research interests in memory. Experience in the use of computer simulation techniques would be an advantage.

Closing date for these positions is 6 December 1977

School of Humanities

The School of Humanities is preparing courses of an Open University kind for off-campus students and applicants for the following posts additions may be obtained from the Dean, Professor Max Charlesworth, and in the case of Australian Studies, from Professor-designate Weston Bate.

Professor of Literature (Ref. 77/1/13)

Applications are invited for a professorial appointment in the area of Literature.

The School of Humanities plans to develop interests in the field of international literature and in interdisciplinary connections between literature and philosophy, literature and history, literature and psychology, etc. Developments are also planned in Drama Studies and Creative Writing.

History of Ideas

Applications are invited for two positions—Reader (Ref. 77/1/14) and Lecturer (Ref. 77/1/15) in History of Ideas.

The School plans a major development in History of Ideas with particular reference (i) to the connections between Philosophy and Literature and the visual arts, and (ii) to the development of the general area of Philosophical Studies, with Philosophy, Social Studies and Religious Studies, and it is hoped that there will be a strong interdisciplinary emphasis in this area.

Lecturer in Australian Studies (Ref. 77/1/16)

Applications are invited from scholars with approaches that will contribute to the development of interdisciplinary courses on Australian topics. A first course, "The Australian City", which has historical and literary perspectives, is to be offered in 1979 and later courses on regionalism and Australian cities are being developed for 1979 and 1980.

As the emphasis of future courses will be influenced by the interests of the appointee, applicants should make firm statements about the relevance of their interests to the development of Australian Studies courses and indicate the suitability of these interests for the preparation of off-campus courses.

Applications are especially invited from demographers, geographers, political scientists and sociologists, provided they wish to pursue their interests within the general climate of a school of humanities. The appointment may be made either fixed term (three years) or tenured.

Closing date for these positions is 12 December, 1977.

School of Sciences

Professor of Computing (Ref. 77/1/19)

Applications are invited for the Foundation Chair in Computing. The School of Sciences has three divisions: Computing and Mathematics, Biological and Health Sciences, and Chemical and Physical Sciences. Each division has an elected administrative chairman, who reports to the Dean of Sciences.

At present the Computer Section of the Division of Computing and Mathematics conducts courses in data processing and computer sciences at undergraduate and postgraduate levels. As the market demand for graduates comes principally from commercially oriented areas, the present undergraduate course is designed to assist in satisfying this need.

Candidates should have demonstrated accomplishments in the application of computing to commerce and business and be able to give leadership in research and associated teaching programs.

A large RECSYSTEM20-60 time-share system will be installed there during 1978.

Reader in Biology (Ref. 77/1/20)

Applications are invited from senior biologists for a Readership in Biology within the Division of Biological and Health Sciences, of the School of Sciences.

Experience in medical microbiology would be particularly appropriate, but candidates with experience in other areas of the life sciences will be considered. The successful candidate will play a major role in the development of research and teaching of Biology within the University.

Closing date for these positions is 15 December, 1977.

School of Social Sciences

The School invites applications for a number of academic posts. One of these may be a Readership (Ref: 77/1/21) in Economics or Political Science. The others will preferably be three or four lectureships (Ref: 77/1/22), tenured or fixed term. Applicants should preferably have special interests in: Economic Thought; the Economics of Underdevelopment; Nuclear Strategy and Arms Control; Politics of Developing areas (Africa or Oceania); 19th and 20th century British, European, International or Commonwealth History; Economic or Political Anthropology (Africa or Oceania).

Closing date for these positions is 6 December, 1977.

SALARY LEVELS per annum (Australian dollars):

Professor	$30,707
Reader	$25,078
Senior Lecturer	$18,677-$22,056
Lecturer	$14,633-$19,703

Applications should quote the reference number and include a full curriculum vitae, the names and addresses of three academic referees and, in the case of applicants for posts at Reader and Professorial level, a recent photograph.

These should be sent to the undersigned so as to arrive by the respective closing dates. Applicants resident in North America, Europe or Africa should also send a copy of their applications to the Association of Commonwealth Universities (Appointments), 36 Gordon Square, London, WC1H 0PF, from whom further details about positions can be obtained.

P.O. Box 125, Belmont, 3216, VICTORIA.

A. L. FRITCHARD, University Secretary.

MURDOCH UNIVERSITY
Perth, Western Australia

Murdoch University, Western Australia's second university, admitted its first students in February, 1975. The University is committed to taking a fresh approach to higher education, with the goal of responding dynamically to the conditions and needs of the late twentieth century. This is reflected in admission policies, organisational structures, programmes of study, philosophies of teaching and recruitment of staff.

The University is organized on a system of schools of study, with the Dean of each school having both academic and administrative responsibility.

Applications are invited from suitably qualified persons for the following position which is to be taken up by1 January, 1978, or as soon thereafter as possible

EXTERNAL STUDIES UNIT
(Director Mr Patrick Guilton)

EDUCATION OFFICER
(Reference: ENO 332)

The person appointed to fill this Academic position will be responsible to the Director of External Studies for co-ordinating the external presentation of courses drawn from the following range of University Programmes: Economics, History, World Literature, Southeast Asian Studies, Teacher Education. The appointee will also be qualified to develop and teach a course by both internal and external modes in one of these Programmes.

The Education Officer's work will include close cooperation with academic staff of the Schools in the development and systematic evaluation of distance mode course materials; student counselling; the organisation of support services for external students and developments in Continuing Education and Tertiary Extension work.

Salary: Lecturer Scale $A14,632 to $A19,202 per annum.

Conditions of appointment include superannuation, similar to F.S.S.U., long service leave, assisted study leave, payment of fares to Perth for appointee and dependent family, removal and settling-in allowance and house purchase scheme.

PROCEDURE FOR APPLICATIONS: There is no prescribed application form, but TWO COMPLETE SETS of detailed applications, quoting the reference number, including full personal particulars, details of tertiary qualifications, careers history with description of posts held, area of special competence and interest, research completed or currently being undertaken, personal views on teaching, membership of professional institutions or societies and positions of responsibility in these; list of relevant material published by the applicant, when available to take up appointment if offered and the names and addresses of three professional referees should reach the Personnel Officer, Murdoch University, Murdoch, Western Australia, 6153, by 21 October, 1977.

Applicants should request the three professional referees to write immediately, quoting the reference number, to the Personnel Officer, Murdoch University.

Applicants resident in the United Kingdom, Europe or Africa at the time of application should also forward ONE further copy to the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, from whom further particulars may be obtained.

THE UNIVERSITY OF PAPUA NEW GUINEA
(PORT MORESBY)

The Department of Anthropology and Sociology invites applications for LECTURER GRADE 2/SENIOR LECTURER IN MELANESIAN ANTHROPOLOGY. Applicants should have had field experience in Melanesia. The appointee will be primarily responsible for undertaking courses in Melanesian anthropology at introductory and advanced level. He/she will also be involved in interdisciplinary courses at Preliminary and Final Year level. The appointee will be expected to play an important part in advising prospective research workers in Papua New Guinea, on research programmes and their applicability for the area and the country. The Department covers courses in anthropology, sociology, social work and prehistory and has at present advertising for a new Professor, whose main interests and expertise are in Melanesia, to fill in the areas of social planning and policy in developing countries.

Applications are inviting for SENIOR TUTOR/TUTOR, DEPARTMENT OF CHEMISTRY. The post is for a carry a four-year contract. Applicants should have a higher degree and should be competent to teach General Chemistry to students in their first two years and Preliminary Year. Further experience in inorganic or Physical Chemistry would be an advantage. Applicants should have a sincere interest in teaching and work well in a challenging environment. Most teaching is carried out in small groups and contact hours are relatively low. The appointee will be prepared to try new and sometimes unconventional teaching methods.

The Department of Chemistry consists of a professor, seven lecturers/senior lecturers and one senior technician. There is a support staff of one chief technician, two senior technicians, five trained technicians and one research officer. Students either graduate from a National High School or by completing a University Year at the Preliminary Year Department specifically designed for the Preliminary Year Science course. This is an integrated course covering Physics, Chemistry, Geography, Geology, Mathematics, Biology and the History of Science and Technology. After matriculation all science-based students complete the Science Foundation Year in which there are two courses of Chemistry, Science and Education students then study further Chemistry courses in second year. In their final two years students will specialise in one or two subjects. Courses are offered in Organic, Inorganic and Physical Chemistry. Emphasis is placed on applied aspects of these, such as Chemical Analysis, Food Chemistry and Spectroscopic Techniques.

SALARIES: Senior Lecturer: K14,044-K15,741 p.a.; Lecturer Grade 2: K10,984-K13,323 p.a.; Senior Tutor: K8,869-K9,863 p.a.; Tutor: K7,113-K8,127 p.a.

(£1 sterling=K1.37). In addition, an allowance of K1,300 per annum if single is payable. An extra K1,000 Married Allowance and K150 per child Child Allowance may also be payable. Applications should include detailed curriculum vitae, a recent small photograph and the names and addresses of three referees. Conditions include provision of housing, annual leave, study leave and F.S.S.U. superannuation. In some cases it may be possible to make an appointment on secondment. Further details and the conditions of appointment are available from the Secretary, Box 1826, University P.O., Papua, New Guinea. Closing date 15th October, 1977.

Universities continued

STATE OF KUWAIT
Kuwait University
Academic Posts for 1978/1979

Applications are invited for the posts of: professors, assistant professors and lecturers. Contracts commence from 1st September 1978, for two years, renewable for a further period of four years, if considered to both applicant and the University.

Applicant should be :—

(a) Holder of Ph.D degree or its equivalent in the respective specialization.

(b) Holder of an academic post at present in an accredited university or research centre.

It should be noted that :—

Teaching in Arabic is a must.

Field of Specialization :

Method of teaching at Kuwait University is based on the credit system.

Department of Education: Educational Psychology, Foundations of Education.

Rank and salary will be determined according to present position, qualification and years of experience.

Monthly total salaries are in the range of :—

Lecturer: KD. 645-765. Assist. professor: KD 765-905. Assoc. professor: KD 905-1045. Professor: KD 1045-1185.

One KD is equivalent to U.S. dollars 3.5. There is no income tax in Kuwait. Currency is freely transferable without any restrictions.

Candidates are also entitled to the following privileges :—

(1) Annual return air tickets to the country of citizenship would be provided to the applicant, his wife and three of his children not exceeding the age of 20.

(2) Free furnished accommodation with water and electric supplies.

(3) Excess baggage allowance in the vicinity of 50 cubic metres for the staff members and 20 cubic metres for each member of his family shall be incurred by the University, provided three members accompany him upon his joining the service.

(4) The staff member shall be entitled to free air freight allowance of 100 kilogrammes provided costs of the said freight for the said cargo do not exceed Kuwaiti Dinars 300 only. This is applied at the beginning and end of the contract.

(5) Gratuity at the end of service shall be one month's basic salary for each year spent in the service of the University.

Academic and curriculum vitae forms are obtainable from the Kuwait Education Office, Kuwait Embassy, 24 Queen's Gate, London, SW7 5JH. Complete application accompanied by three letters of recommendation together with a non-returned copy of the candidate's publications should be submitted directly to Kuwait University, Department of Administrative Affairs, P.O. Box 8565, Kuwait, not later than 31.12.1977. Short terms contract (e.g. sabbatical, visiting, etc.) will also be considered.

KELVIN GROVE COLLEGE OF ADVANCED EDUCATION
BRISBANE, QUEENSLAND, AUSTRALIA

Kelvin Grove College of Advanced Education is an autonomous, multi-vocational College with its major emphasis in teacher education. Its teacher education programmes include pre-service courses for Pre-School, Primary and Secondary teaching, in-service part-time and external courses leading to an upgrading Diploma in Teaching, post-graduate courses in Outdoor Education, Resource Teaching, and Teacher Librarianship and a post-graduate course leading to a Bachelor of Education. In addition, Associate Diploma courses in Residential Care, Visual Arts and Performing Arts (Theatre) are offered. A new course in Performing Arts (Dance) will commence in February, 1978.

The College overlooks the city from a position two kilometres from its business centre. Student enrolment in 1977 is approximately 2,300.

Applications are invited for the position of :

REGISTRAR
REF. NO. 77/A/16

DESCRIPTION

The appointee will be the chief administrative officer of the College responsible to the College Council and the Director who is the chief executive and academic officer of the College. The appointee will be responsible for all operations of the College in respect of staff and personal property, all aspects of student administration, records, statistics, handbooks, course details and regulations, administrative aspects of staff appointments, conditions of service, and public communications. The appointee will be secretary to the College Council and also be responsible for the provision of secretarial services to Council Committees and the College Board. Additional information will be provided on request.

QUALIFICATIONS :

The successful applicant will have tertiary qualifications, preferably but not necessarily at higher degree level, administration experience preferably in the administration of academic institutions and also will possess the qualities of leadership and effective human relations that are necessary for this senior executive position.

Experience in academic teaching and/or budget control would be desirable. Additional qualifications.

The successful applicant will be expected to take up the appointment at the commencement of the 1978 academic year.

SALARY :

Annually within the range $10,674 to $20,050.

CLOSING DATE : OCTOBER 31, 1977.

Applications, giving full personal and educational details and vocational experience, should be marked "Confidential" and addressed to the Director, Kelvin Grove College of Advanced Education, Victoria Park Road, Kelvin Grove, Queensland, Australia 4029.

NATIONAL UNIVERSITY OF LESOTHO

Applications are invited for two posts of

ASSISTANT LIBRARIAN

Applicants should preferably have a degree plus a Higher Diploma in Librarianship or ALA or MLS/MA (Librarianship) and should be familiar with the Anglo-American Cataloguing Rules 1967 and the Dewey Decimal Classification 18th Edition. It is expected that the successful applicant should also have relevant experience related to cataloguing duties. The posts will be for Assistant Librarian (Bookshop). A Librarian with professional experience in the Acquisitions Department is preferred. Duties will include: (a) the processing of orders for University text books; (b) liaison between the Bookshop and the University and (c) Other professional duties in the Library. Salary scale: R5,493-R7,557 per annum (£1 sterling=R1.51) Non-contributory superannuation scheme for appointees on permanent terms. Appointees on contract terms receive 25% gratuity in lieu of superannuation for the first two years of the contract, rising to 37½% and 30% for each subsequent and similar portion of service. 15% Inducement allowance for expatriates not qualifying for any superannuation scheme. Accommodation is not immediately available. Passages and baggage entitlement on first appointment and at normal termination for appointee, wife and dependent children under the age of 21. Education allowance for expatriates. Vacation leave. Medical aid scheme. Detailed applications (three copies) including a full curriculum vitae and naming three referees with addresses should be sent by airmail not later than 27 October, 1977, to the Registrar (Appointments), NUL, Roma, Lesotho. Applicants resident in the UK should also send one copy to the Inter-University Council for Higher Education Overseas, 20-32 Tottenham Court Road, London W1P 0DT. Further particulars may be obtained from either address.

UNIVERSITY OF CAPE TOWN
CHAIR OF PHYSICAL OCEANOGRAPHY

Applications are invited for their Chair of Physical Oceanography. Appointment, according to qualifications and experience, will be made on the salary scale R10,800 x R450-R12,600 x R600-R13,800, plus a pensionable allowance of 10 per cent of basic salary.

The successful candidate should have appropriate training and research experience within the broad field of Physical Oceanography, preferably in geophysical fluid dynamics in addition to his teaching duties at undergraduate and postgraduate level, he will be expected and actively encouraged to pursue his own research programme, and those of graduate research students under his supervision for which he may expect ample financial support.

Applicants should submit a curriculum vitae, stating present salary, details of teaching and research experience to date, and publications, date available if appointed, and the names and addresses of three referees.

Memoranda concerning the Department, and general conditions of service, may be obtained from the Registrar, Room 1, University of Cape Town, Private Bag, Rondebosch 7700, South Africa, by whom applications must be received not later than 1st November, 1977.

UNIVERSITY OF GUYANA
VACANCY—LIBRARY

APPLICATIONS ARE INVITED FROM SUITABLY QUALIFIED CANDIDATES FOR THE POST OF

SENIOR ASSISTANT LIBRARIAN
IN CHARGE OF
TECHNICAL SERVICES
IN THE UNIVERSITY LIBRARY

The minimum qualifications required are advanced professional qualifications, or a first degree plus post-graduate qualifications in Librarianship, plus at least two years' experience of relevant University Library work.

Salary will be on the Lecturer/Senior Lecturer scale, $19,000 to $28,500 per annum (the existing equivalent to approx. £1,730 to £2,590), with entry point according to qualifications and experience.

The appointee will be responsible for supervising the work of 11 staff in the Acquisitions and Technical Services, and will act as Chief Cataloguer. A knowledge of the U.D.C. classification will be an advantage and experience of staff training is desirable.

Assistance towards fares for appointee, wife and children under the age of 21 will be provided with up to four children accompanying the head of family. Assistance towards fares (first class) for unaccompanied children between the ages of 16 and 21 years of age. Limited removal expenses, a settling-in allowance and baggage allowance will be paid. Vacation/Study leave after three (3) consecutive years of service with the University and upon renewal of contract. Contributory medical and pension schemes in operation.

Applications (3 copies) stating date of birth, qualifications and dates obtained, experience with full names and addresses of three referees (one of whom must be your present or last employer) should be sent to: The Secretary, Personnel Division, University of Guyana, P.O. Box 841, Georgetown, Guyana, South America, before October 15, 1977.

Further details about Library available upon request.

UNIVERSITY OF NAIROBI KENYA

Applications are invited for the post of

SENIOR LECTURER/ LECTURER IN THE DEPARTMENT OF BOTANY

Applicants must be qualified in any of the following: Terrestrial Ecology, Marine Ecology, Molecular Genetics and Population Genetics. They must have a Ph.D. in Botany with extensive teaching and research experience as evidenced by published work. The appointees will be expected to take part in the teaching of both undergrads and postgrads and to develop rigorous research programmes in their areas of specialization. Salary scales: Senior Lecturer KE2,572-KE3,900 p.a. Lecturer KE1,800-KE3,096 p.a. (KE1=£1.38 sterling). The British Government may supplement salaries in range £5,354-£4,128 p.a. (sterling) for married appointees or £3,654-£2,880 p.a. (sterling) for single appointees (supplements normally free of all tax and relieved annually) and provide children's education allowances and holiday visit passages. F.S.S.U.; family passages; various allowances. Detailed applications (2 copies) including a curriculum vitae and naming 3 referees should be sent by air mail not later than 27 October, 1977, to the Registrar (Recruitment and Training), University of Nairobi, P.O. Box 30197, Nairobi, Kenya. Applicants resident in UK should also send 1 copy to Inter-University Council, 20-32 Tottenham Court Road, London W1P 0DT. Further particulars may be obtained from either address.

AUSTRALIAN NATIONAL UNIVERSITY
Institute of Advanced Studies

DIRECTOR OF THE RESEARCH SCHOOL OF PHYSICAL SCIENCES

The University seeks to appoint a Head of the Research School of Physical Sciences to succeed Professor Robert Street, FIP, FAIP, FAA, who will be leaving the University in February, 1978 to take up the post of Vice-Chancellor at the University of Western Australia.

The Head of a Research School is responsible through the Vice-Chancellor to the University Council for the operation and development of the School and for its administrative and financial management. The Director's most important role is that of scientific leadership; academic distinction within an area appropriate to the School is therefore essential. The Research School of Physical Sciences carries out basic experimental and theoretical research into selected fields of the physical and mathematical sciences. The work is organized into seven departments and three smaller units with about 100 academic staff, 80 research students and postdoctoral fellows and 80 supporting staff. There are no undergraduate students

The person appointed will hold a Chair in the University until retiring age. The term of office as Director will be fixed by the University in consultation with the person recommended.

Those who may be interested in being considered for this appointment are invited to write, as soon as possible, to the Vice-Chancellor from whom further information may be obtained.

Director,
Academic Registrar.

PO Box 4,
Canberra ACT 2600,
Australia.

Applications are invited for a

SENIOR POSITION IN SHAKESPEARE AND RENAISSANCE DRAMA

Applicants should have distinguished publications in this area and experience teaching and supervising graduate students.

Rank and salary will be commensurate with qualifications and experience. The appointment, subject to the availability of funds, would be effective July 1, 1978.

Applications should be sent by December 1, 1977, to Professor John T. Ogden, Acting Head, Department of English, University of Manitoba, Winnipeg, Manitoba, R3T 2N2.

UNIVERSITY OF NAIROBI KENYA

Applications are invited for the posts of

SENIOR LECTURER/ LECTURER in the DEPARTMENT OF PHYSICS

Applicants must have a Ph.D. in Physics with extensive teaching and research experience as evidenced by published work. The appointees will be expected to take part in the teaching of both undergrads and postgrads courses and to develop rigorous research programmes in their areas of specialization. Salary scales: Senior Lecturer KE2,572-KE3,900 p.a. Lecturer KE1,800-KE3,096 p.a. (KE1=£1.38 sterling). The British Government may supplement salaries in range £5,354-£4,128 p.a. (sterling) for married appointees or £3,654-£2,880 p.a. (sterling) for single appointees (supplements normally free of all tax and relieved annually) and provide children's education allowances and holiday visit passages. F.S.S.U.; family passages; various allowances. Detailed applications (2 copies) including a curriculum vitae and naming 3 referees should be sent by air mail not later than 27 October, 1977, to the Registrar (Recruitment and Training), University of Nairobi, P.O. Box 30197, Nairobi, Kenya. Applicants resident in UK should also send 1 copy to Inter-University Council, 20-32 Tottenham Court Road, London W1P 0DT. Further particulars may be obtained from either address.

UNIVERSITY OF THE WEST INDIES, TRINIDAD

Applications are invited for the post of

LECTURER/ASSISTANT LECTURER in INORGANIC CHEMISTRY

in the Department of Chemistry. Salary scales (1977-78), Lecturer, TT$19,071 to $29,799 p.a. Assistant Lecturer, TT$15,456 to $16,074 p.a. (£1 sterling equals TT$4.18). F.S.S.U. Subsidised accommodation, if available at 10 per cent or furnished at 12½ per cent of basic salary. Assistance with passages and removal expenses on appointment and on normal termination for appointee, wife and children under 18 years of age. Study and Travel Grant. Duties to include teaching and research in Inorganic Chemistry. Candidates should have a Ph.D. degree and a minimum of two years' post-doctoral experience. Applications (3 copies) should be sent by 28th October, 1977, to the Registrar (Recruitment and Training), University of the West Indies, St. Augustine, Trinidad. Senior Lecturer/Lecturer candidates resident in the UK should also send one copy to the Inter-University Council, 20-32 Tottenham Court Road, London W1P 0DT.

UNIVERSITY OF THE WEST INDIES
TRINIDAD

Applications are invited for the post of SENIOR LECTURER/ LECTURER IN PHYSICS, University of the West Indies, St. Augustine, Trinidad. Salary Scales: Senior Lecturer TT$ 29,727-TT$41,017 p.a. Lecturer TT$19,071-TT$29,799 (£1 sterling equals TT$4.18). F.S.S.U. Unfurnished accommodation if available at $5.50 per cent or furnished at 12½ per cent, or housing allowance of 20 per cent of pensionable salary. Study and Travel Grant. Up to five full economy passages, on appointment and on normal termination.

Detailed applications naming three (3) referees to the Secretary, UWI, St. Augustine, Trinidad, as soon as possible. Details of post sent to all applicants.

LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY

CAREERS ADVISER

Applications are invited for the post of CAREERS ADVISER to join an existing team. The work involves advising students on careers, employment opportunities, further education and training, with associated duties. Candidates should be graduates, preferably in science or technology, with experience of industry or any other graduate employment area.

Salary within scale £2,904-£5,827 (under review). Closing date for applications 31st October. Postcard requests for further details and application form to Paul Hall, Establishment Officer, tel. 77/30AD(1U).

Loughborough *Leicestershire*

UNIVERSITY OF THE WEST INDIES, TRINIDAD

Applications are invited for the post of

LECTURER/ASSISTANT LECTURER in INORGANIC CHEMISTRY

in the Department of Chemistry. Salary scales (1977-78), Lecturer, TT$19,071 to $29,799 p.a. Assistant Lecturer, TT$15,456 to $16,074 p.a. (£1 sterling equals TT$4.18). F.S.S.U. Subsidised accommodation, if available at 10 per cent or furnished at 12½ per cent of basic salary. Assistance with passages and removal expenses on appointment and on normal termination for appointee, wife and children under 18 years of age. Study and Travel Grant. Duties to include teaching and research in Inorganic Chemistry. Candidates should have a Ph.D. degree and a minimum of two years' post-doctoral experience. Applications (3 copies) should be sent by 28th October, 1977, to the Registrar (Recruitment and Training), University of the West Indies, St. Augustine, Trinidad. Senior Lecturer/Lecturer candidates resident in the UK should also send one copy to the Inter-University Council, 20-32 Tottenham Court Road, London W1P 0DT. Further particulars may be obtained from either address.

UNIVERSITY OF CALIFORNIA, IRVINE

Positions, both at the Junior and Senior Professorial levels, in the School of Social Sciences. Duties involve graduate and undergraduate teaching in the areas of microeconomics, econometrics, and other basic topics, especially as they relate to the subject matter of public policy. Research areas preferred; theoretical and empirical problems in the areas of public policy analysis, political economy, public choice, and other topics associated with the non-markets sector of society. Candidates' research areas should compliment the interests of the existing faculty. Applicants must possess a Ph.D. post-doctoral training is preferred. Only applicants with outstanding research credentials will be considered. Applications from all qualified candidates are welcomed; minorities and women are encouraged to apply. Send curriculum vitae and the names of five references (three in the case of junior position) to:

Dean Chistian Werner,
School of Social Sciences,

University of California,
Irvine, California 92717

Equal Opportunity Employer M/F

UNIVERSITY OF NAIROBI KENYA

Applications are invited for the post of

SENIOR LECTURER/ LECTURER in PLANT PHYSIOLOGY

in the Department of Botany. Applications are invited from highly qualified individuals with commitment to teaching and research in plant physiology or plant biochemistry. Teaching responsibilities include participation in the introductory course in plant function and advanced undergraduate courses in plant physiology and biochemistry, and supervision of graduate students in the area of the applicant's research interest. Salary scales: Senior Lecturer KE2,572-KE3,900 p.a. Lecturer KE1,800-KE3,096 p.a. (KE1=£1.38 sterling). The British Government is undertaking to supplement salaries in the range £5,354-£4,128 p.a. (sterling) for married appointees or £3,654-£2,880 p.a. (sterling) for single appointees (supplements normally free of all tax and relieved annually) and provide children's education allowances and holiday visit passages. F.S.S.U.; family passages; various allowances. Detailed applications (2 copies) including a curriculum vitae and naming 3 referees should be sent by air mail not later than 27 October, 1977, to the Registrar (Recruitment and Training), University of Nairobi, P.O. Box 30197, Nairobi, Kenya. Applicants resident in UK should also send 1 copy to Inter-University Council, 20-32 Tottenham Court Road, London W1P 0DT. Further particulars may be obtained from either address.

BATH
THE UNIVERSITY

PROFESSOR OF PHYSICS

Applications are invited for a PROFESSORSHIP in the School of Physics, tenable from September 1978.

The University is seeking to appoint a physicist of outstanding attainments who will be sympathetic to existing activities already established in geophysics and atmospheric physics and at the same time be able to develop his/her own research interests.

Persons who wish to be considered for the appointment should write for further particulars to the Senior Staff Officer, University of Bath, Bath BA2 7AY, Avon (quoting reference number 1/0/1) for applications: 1st November 1977.

LONDON
THE UNIVERSITY

CHELSEA COLLEGE
DEPARTMENT OF MATHEMATICS
TENABLE AT CHELSEA COLLEGE

Applications are invited for the Rhodes Chair of Mathematics Education tenable at the Department of Mathematics, Chelsea College. The Chair will become vacant from January 1978 following the retirement of Professor Geoffrey Matthews. The Rhodes Professor is responsible for the Mathematics Education Unit within the Centre for Science Education.

The Unit's activities include initial and in-service teacher training in mathematics education, research and research.

Current research projects include computer assisted learning, development of pre-school mathematics materials and diagnostic learning.

Further particulars should be obtained from the Academic Registrar, Chelsea College, Manresa Road, London SW3 6LX (quoting reference number 1/0/2) to whom applications should be sent by 31st October. Closing date for receipt of applications is 16th November, 1977.

BIRMINGHAM
THE UNIVERSITY

FACULTY OF COMMERCE AND SOCIAL SCIENCE
DIRECTOR OF THE WATER INDUSTRY MANAGEMENT UNIT

Applications are invited for appointment, soon to be supported to the post of Director of the Water Industry Unit, which undertakes research for members of the industry and research into and education of professional water management.

The Director should have a background in geography, geographical techniques, regional economics, operational research or in other appropriate fields relevant to the management of water resources.

Applications (three copies) naming three referees should be sent by 27 October to the Assistant Registrar, Personnel Section, The University, Birmingham B15 2TT, quoting reference number 1/0/3 for applications: 1st November 1977.

LONDON
THE UNIVERSITY

SIR JOHN CASS'S DEPARTMENT OF MATHEMATICS TENABLE AT CHELSEA COLLEGE

Applications are invited for the Chair of Pharmaceutics tenable at Chelsea College.

Applications are invited for readerships in Pharmaceutics, tenable as from 1st April 1978. Persons from all fields of pharmaceutical research will be considered for the readerships. The Professor of Pharmaceutics is responsible for undertaking research and teaching in the Academic Unit of Pharmaceutics, Manresa Road, London SW3 6LX, before whom applications should be sent by 31st October. Closing date for receipt of applications is 16th November, 1977.

LONDON
THE UNIVERSITY

CHAIR OF PHARMACEUTICS TENABLE AT CHELSEA COLLEGE

Applications are invited for the Chair of Pharmaceutics tenable at Chelsea College from 1st April 1978. Persons from all fields of pharmaceutical research will be considered for the Professorship of Pharmaceutics. The Professor is responsible for undertaking research and teaching in the Academic Unit of Pharmaceutics, Manresa Road, London SW3 6LX, before whom applications should be sent by 31st October. Closing date for receipt of applications is 16th November, 1977.

Girton College Cambridge

Applications are invited for three research fellowships open to graduates of the University and tenable for three years from 1st October 1978:

1. A research fellowship in Arts is offered for research in any branch of learning except Mathematics and Natural Sciences.
2. A scientific research fellowship is offered for research in Mathematics, Natural Science, Geography or allied subjects.
3. The Margaret Smith Research Fellowship open to a graduate of not less than 25 years of age whose field of research lies in chemistry and Western religions or, alternatively, for research based on either Arabic or Persian literature.

Each fellowship is to the value of £2,250 per annum for a candidate with a Ph.D. and £2,050 per annum to a candidate who has not completed a Ph.D. The fellowships are pensionable under F.S.S.U.

Particulars are available from the Secretary to the Council, Girton College, Cambridge CB3 0JG, to whom applications should be sent by 15th December, 1977.

University of Wales
UWIST
DEPARTMENT OF MATHEMATICS
TUTORIAL ASSISTANT

(expected to work for PhD)

Preference will be given to applicants with research interests in Computer Simulation Modelling or Allied studies

Postgraduate experience or Master's degree in a relevant subject required.

Salary Scale £2904 : £3119 : £3333

Requests (quoting Ref. THES) for details and application form to **Personnel Section (Academic), UWIST, Cardiff CF1 3NU**

Closing date : 28th Oct. 1977

THE UNIVERSITY OF THE WEST INDIES
TRINIDAD

Applications are invited for the post of SENIOR LECTURER/ LECTURER in PHYSICS, University of the West Indies, St. Augustine, Trinidad. Salary Scales: Senior Lecturer TT$ 29,727-TT$41,017 p.a. Lecturer TT$19,071-TT$29,799 (£1 sterling equals TT$4.18). F.S.S.U. Unfurnished accommodation if available at $5.50 per cent or furnished at 12½ per cent, or housing allowance of 20 per cent of pensionable salary. Study and Travel Grant. Up to five full economy passages, on appointment and on normal termination.

Detailed applications naming three (3) referees to the Secretary, UWI, St. Augustine, Trinidad, as soon as possible. Details of post sent to all applicants.

LEEDS
THE UNIVERSITY

DEPARTMENT OF POLITICS
LECTURESHIP IN THE POLITICS OF DEVELOPING COUNTRIES

Applications are invited for a post in the above department from persons with appropriate qualifications in politics or sociology. The post should be one expected to teach in the government and politics of one or more developing countries and to undertake research in this area. In the appointment consideration will be given to applicants with a knowledge of sociology in which case the lectureship appointee will also be expected to contribute.

Salary will be at an appropriate point on the scale £2,904-£5,827 (under review).

Application forms and further particulars may be obtained from the Registrary, The University, Leeds LS2 9JT, quoting reference number 2478/10. Closing date for applications 14th November, 1977.

LONDON
BIRKBECK COLLEGE
UNIVERSITY OF LONDON

RESEARCH ASSISTANT in ECONOMICS

Applications are invited for a one year appointment as RESEARCH ASSISTANT in the DEPARTMENT of ECONOMICS to work on a new, SSRC financed project on the macro-economic policy implications of expenditure on public services. The project will involve econometric modelling, computer programming and the use of national accounts data required.

Salary in range £3,766 to £4,785 plus London allowance of £1,060 - Immediate appointment.

Application forms and further particulars from Personnel Officer (AR), Birkbeck College, Malet Street, London WC1E 7HX.

UNIVERSITY OF THE WEST INDIES
TRINIDAD

Applications are invited for the post of SENIOR LECTURER/ LECTURER IN THE DEPARTMENT OF BOTANY

Applicants must be qualified in any of the following: Terrestrial Ecology, Marine Ecology, Molecular Genetics and Population Genetics. They must have a Ph.D. in Botany with extensive teaching and research experience as evidenced by published work. The appointees will be expected to take part in the teaching of both undergrads and postgrads courses and to develop rigorous research programmes in their areas of specialization. Salary scales: Senior Lecturer TT$ 29,727-TT$41,017 p.a. Lecturer TT$19,071-TT$29,799 (£1 sterling equals TT$4.18). F.S.S.U. Unfurnished accommodation if available at $5.50 per cent or furnished at 12½ per cent, or housing allowance of 20 per cent of pensionable salary. Study and Travel Grant. Up to five full economy passages, on appointment and on normal termination.

Detailed applications naming three (3) referees to the Secretary, UWI, St. Augustine, Trinidad, as soon as possible. Details of post sent to all applicants.

Universities continued

AUSTRALIA

Applications are invited for the following posts, for which applications close on the dates shown. SALARIES (unless otherwise stated) are as follows: Senior Lecturer $A19,878-$A22,955; Lecturer $A14,832-$A19,282. Further details, conditions of appointment for each post, method of application and application form, where applicable, may be obtained from The Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

Flinders University of South Australia

LECTURER IN ACCOUNTING

School of Social Sciences

The appointee will join the Reader in Accounting in development of the University's postgraduate Diploma in Accounting course which will accept its first students in March, 1978. The appointee will be located in the discipline of Economics.
28 October 1977.

Macquarie University Sydney

SENIOR LECTURER SCHOOL OF EDUCATION

Teacher Education Program
The successful applicant will be required to act as a co-ordinator of courses in the teaching of English and History in the secondary school.
It is desirable that candidates hold a higher degree and have administrative and secondary teaching experience within one or both of these disciplines. Preference will be given to candidates who also have had experience in pre-service and in-service teacher education programmes and have shown an active interest in recent developments in the teaching of English and/or History.
21 October 1977.

University of New England Armidale, New South Wales

TEMPORARY LECTURER DEPARTMENT OF DRAMA

Appointee will take charge of a new Drama and Theatre methods course commencing in 1978. Duties will also include Lectures, tutorials and workshops in History of Drama and Development of Theatre practice either Classical Greek to Late eighteenth or early nineteenth to present day. Applicants should be well qualified in practical and academic aspects of Drama. Experience at Primary and/or Secondary teaching levels and at tertiary level training for Drama specialists given preference.
Salary: $A14,145-$A18,884.
4 November 1977.

University of Melbourne

LECTURER (LIMITED TENURE) IN MODERN GREEK

Department of Classical Studies
Qualifications: Applicants should hold a degree (preferably with honours) or have been engaged in postgraduate work, of which the study of Modern Greek language and literature has formed a major part. Preference will be given to applicants who have qualifications also in Byzantine and/or Classical Greek. Applicants must be fluent in English.
31 October 1977.

University of Melbourne

LECTURER DEPARTMENT OF LEGAL STUDIES

Faculty of Economics and Commerce
The successful applicant will teach law mainly to Bachelor of Commerce students who may include Legal Studies subjects in one, two or three years of their course. The first two years of the Legal Studies course are largely in Contract and Company Law with Commercial Law specialisation in the third year. The successful applicant would be expected to lecture in one of the first two courses in addition to a third year specialisation.
30 October 1977.

BANGOR

UNIVERSITY COLLEGE OF NORTH WALES

RESEARCH PROJECT INTO THE DELIVERY OF SOCIAL SERVICES IN RURAL AREAS

Applications are invited for the post of RESEARCH OFFICER in connexion with the above project which is funded by the Welsh Office and the Department of Health and Social Security. The project team is based within the Department of Social Theory and Institutions and the research has the full cooperation of the Gwynedd and Clwyd County Councils.

Applicants should have community work or social work experience, preferably with the elderly. Research or practitioner experience in a rural area would be an advantage and a knowledge of Welsh, though not essential, would be useful.

The appointment will be from January 1, 1978, until September, 1981. Salary will be on the Research and Analogous Scale, £3,333 to £6,627 per annum, but the point on the scale will be dependent on the applicant's qualifications and experience.

Further particulars regarding the post can be obtained from the Project Director (Dr. Gordon Grant) who would be willing to have informal discussions regarding the nature of the post with interested applicants.

Applications (two copies), giving details of age, education and experience, together with the names and addresses of two referees, should be sent to the Assistant Registrar (Personnel), University College of North Wales, Bangor, Gwynedd LL57 2DG, by not later than Saturday October 29, 1977.

LIVERPOOL

THE UNIVERSITY

INSTITUTE OF EXTENSION STUDIES

Applications are invited for the post of LECTURER in ECONOMICS and INDUSTRIAL STUDIES in the Institute of Extension Studies. Candidates should hold a good honours degree and have a special knowledge of Industrial Studies. Duties include the maintenance and development of a programme of advanced courses for trade unionists and management in Merseyside and other parts of North-West England.

The initial salary will be within the range £3,333-£4,811 per annum on a scale rising to £6,655 per annum according to age, qualifications and experience.

Applications, together with the names of three referees, should be received not later than October 28, 1977, by the Registrar, The University, P.O. Box 147, Liverpool L69 3BX, from whom further particulars may be obtained. Quote Ref.: RV/567/THES.

THE OPEN UNIVERSITY

INSTITUTE OF EDUCATIONAL TECHNOLOGY
RESEARCH ASSISTANT—AUDIO-VISUAL MEDIA RESEARCH

Applications are invited for a Research Assistant in the Audio-Visual Media Research Group of the Institute of Educational Technology.

The successful applicant will join a small team investigating the most effective methods of using television, radio and other audio-visual media for teaching Open University students and will work closely with BBC producers, course teams and administrators.

Applicants should be trained and experienced in social science research methods, or educational evaluation and will normally have at least a B.A., B.Sc., or higher degree in psychology, education, mass communications, statistics or related subjects. Experience in broadcasting or in the design of audio-visual teaching materials would be a distinct advantage.

The appointment will be for three years in the first instance. Salary scale: Research Assistant £2,904-£4,190 per annum.

Further particulars and application forms are available, by postcard request please, from The Personnel Manager, (RA9), The Open University, P.O. Box 75, Walton Hall, Milton Keynes MK7 6AL, or by telephone from Milton Keynes 63868. Closing date for applications: 24th October, 1977.

LANCASTER

THE UNIVERSITY

CENTRE IN SIMULATION RESEARCH ASSOCIATE'S PROGRAMMER

Applications (men or women) are invited from those with an interest in simulations for the above posts in this newly formed unit in the Operational Research Department. Salary on the scale £3,333-£6,627, and the posts are for up to three years.

Further particulars may be obtained (quoting reference L.2/B and also post applied for) from the Establishment Officer, University House, Bailrigg, Lancaster LA1 4YW, to whom applications (six copies) naming three referees should be sent not later than October 26, 1977.

NEW ZEALAND

UNIVERSITY OF CANTERBURY CHRISTCHURCH
LECTURER IN GEOLOGY

Applications are invited for the above-mentioned position. Preference will be given to a candidate with interests in geochemistry, and experience in the use of XRD and XRF equipment.

The salary for Lecturers is on a scale from NZ$10,239 to $12,543 per annum.

Particulars, including information on travel and removal allowances, study leave, housing and superannuation may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

Applications close on November 18, 1977.

CARDIFF

UNIVERSITY COLLEGE

DEGREE OF M.ED.

Applications are invited for admission to full and part-time courses leading to the degree of MASTER of EDUCATION of the University of Wales, to begin in October, 1978.

Candidates should:

(a) Hold a degree of a British or other approved university, or an equivalent qualification, or an advanced teaching diploma;

(b) Be qualified teachers or hold qualifications deemed relevant for the course of study;

(c) Have had at least two years' teaching or other relevant professional experience.

Candidates must select one of two modes of study.

Method A is by research and the presentation of a thesis; candidature for this mode will only be approved in certain circumstances.

Method B is by course work and examination, in any two options, and the presentation of a dissertation of up to 20,000 words.

The following options are offered:

(1) Art Education.
(2) Economics of Education.
(3) Educational Administration.
(4) Educational Psychology.
(5) Educational Technology.
(6) History of Education.
(7) Law of Education.
(8) Philosophy of Education.
(9) Sociology of Education.

The following options are full-time only:

(10) Education of Children with Behavioural Problems.
(11) Education and Development in Developing Countries.
(12) Teaching English as a Foreign Language (special option).

Method A candidates may offer topics related to the above or in other related areas such as curriculum studies, further education and evaluation. A service course in educational statistics and research methods is provided for full-time students.

The degree may be awarded after two years' full-time or three years' part-time study or after a combination of full-time and part-time study. In certain circumstances less time may be taken.

Serving teachers may be eligible for secondment on full salary if employed by Local Education Authorities in England and Wales, or for grants from the Department of Education and Science if employed in independent schools. Serving teachers may also be eligible for grants if they study on a part-time basis.

Further information and application forms may be obtained from the Registrar, University College, P.O. Box 78, Cardiff CF1 1XL.

Applications should be submitted before December 31, 1977.

SURREY

THE UNIVERSITY

DEPARTMENT OF SOCIOLOGY

LECTURER

Applications are invited for the post of Lecturer. The person appointed will be responsible for teaching the probation option in the one year postgraduate course in Applied Social Studies and also for courses in Deviance to undergraduate and post-graduate students. Preference will be given to applicants with experience of empirical social research capable of supervising undergraduate and post-graduate dissertations in deviance and associated fields.

The post is available from January 1, 1978, but applicants unable to join the Department until a later date will be considered on equal terms.

Salary will depend on age and experience and will be within the range £3,333 to £6,655, with superannuation under U.S.S. conditions.

Further particulars of the post may be obtained from the Academic Registrar (T.F.G.), University of Surrey, Guildford, Surrey, GU2 5XH, or telephone: Guildford 71281, ext. 452, and to whom applications in the form of a curriculum vitae, including the names and addresses of two referees, should be sent by: October 31, 1977.

HULL

THE UNIVERSITY

DEPARTMENT OF SOCIAL ADMINISTRATION

RESEARCH ASSISTANT

SOCIAL SCIENCE GRADUATE required for one year to assist in a critical survey of the United Kingdom literature on marital problems which is designed to provide a bibliography, assess empirical findings, review theoretical frameworks and evaluate potentials for future research. The project is directed by Mr Robert Chester.

Salary will be at a suitable point within the range £2,904 to £3,761 per annum.

Applications (4 copies) giving details of age, qualifications and experience together with the names of two referees should be sent by October 21st 1977, to the Registrar, The University of Hull, HU6 7RX, from whom further particulars may be obtained.

UNITED STATES

UNIVERSITY OF PENNSYLVANIA

THOURON AWARDS

Under the Foundation of Sir John and Lady Thouron, applications are invited, before 8th November, 1977, from candidates under 28 years and unmarried for TEN AWARDS of the value of approximately $5,760 each plus tuition fees and tenable from 1st September, 1978, at the postgraduate level in any recognized department of study in the University of Pennsylvania, Philadelphia, United States.

Prospective applicants should send a stamped and addressed foolscap envelope to the Registrar (Thouron Awards), University of Glasgow, Glasgow G12 8QQ.

In reply please quote Reference Number 30921.

LIVERPOOL

THE UNIVERSITY

DEPARTMENT OF ENGLISH LITERATURE

Applications are invited for the post of LECTURER in the DEPARTMENT of ENGLISH LITERATURE, tenable from January 1, 1978. Qualifications in modern literature, especially poetry, will be preferred.

The initial salary will be within the range £3,333-£3,761 per annum on a scale rising to £6,655 per annum.

Applications, together with the names of three referees, should be received not later than October 27, 1977, by the Registrar, The University, P.O. Box 147, Liverpool L69 3BX, from whom further particulars may be obtained. Quote Ref.: RV/560/THES.

LIVERPOOL

THE UNIVERSITY

DEPARTMENT OF ENGLISH LANGUAGE

Applications are invited for the post of LECTURER in the DEPARTMENT of ENGLISH LANGUAGE. The successful applicant will be expected to teach courses in Medieval English Literature and Language.

The post is tenable from January 1, 1978, at an initial salary within the range £3,333-£3,761 per annum on a scale rising to £6,655 per annum according to qualifications and experience.

Applications, together with the names of three referees, should be received not later than October 28, 1977, by the Registrar, The University, P.O. Box 147, Liverpool L69 3BX, from whom further particulars may be obtained. Quote Ref.: RV/568/THES.

LONDON S.W.7

ROYAL COLLEGE OF ART

Applications are invited for the appointment of TUTOR in the SCHOOL OF INDUSTRIAL DESIGN.

Candidates should be capable of contributing to the development of the theory and practice of industrial design and in teaching at a postgraduate level. This will be a full-time appointment within the salary range £3,783 to £7,105 including London Allowance, and the starting salary will be fixed to take account of qualifications and previous experience.

Further details and application form can be obtained from the Assistant Registrar (Staff), Royal College of Art, Kensington Gore, London SW7 2EU.

LONDON

UNIVERSITY COLLEGE LONDON

DEPARTMENT OF CIVIL AND MUNICIPAL ENGINEERING
RESEARCH INTO BUCKLING OF STEEL MARINE SHELL STRUCTURES

RESEARCH ASSISTANT required to undertake investigations into the buckling of steel shell structures. The work involves both theoretical and experimental studies and will be part of the newly established S.R.C. London Centre for Marine Structures and Materials. The project is aimed at establishing valid methods of design for steel shells used in existing marine structures and those projected for the future.

Salary according to qualifications and experience in the range £2,927 to £4,149 plus £450 London Allowance.

Applications should be sent to Dr. J. H. A. [illegible], Department of Civil and Municipal Engineering, University College London, Gower Street, London WC1E 6BT.

SOUTH AFRICA

UNIVERSITY OF THE WITWATERSRAND
Johannesburg

LECTURER/JUNIOR LECTURER/ASSISTANT LECTURER

DEPARTMENT OF ENGLISH

The Department of English has vacancies available at various levels. Applicants should indicate clearly their special fields of interest.

The salary and level of appointment will be determined in accordance with the qualifications and experience of the successful applicants. Benefits include an annual bonus, pension and medical aid facilities, and a housing subsidy, if eligible.

The University's policy is not to discriminate in the appointment of staff or the selection of students on the grounds of sex, race, religion or colour. Further particulars relating to this practice are included in an information sheet obtainable from the London Representative, University of the Witwatersrand, 278 High Holborn, London, WC1V 7HE, or from the Registrar, University of the Witwatersrand, Jan Smuts Avenue, Johannesburg, South Africa, 2001, with whom applications should be lodged not later than 15th October, 1977.

SOUTHAMPTON

THE UNIVERSITY

ELECTRICAL ENGINEERING DEPARTMENT

RESEARCH OPPORTUNITY IN SURFACE COATING SYSTEMS

A vacancy exists for a Research Fellow or Assistant to work with an existing team studying electrostatic powder coating processes. This project, which is in collaboration with Loughborough University, is sponsored by the S.R.C. and is also supported by a substantial grant from a consortium of fourteen Companies.

The successful candidate will be responsible for a study of a continuous flow coating system having applications in the automobile, domestic appliances and similar mass production industries.

An honours degree in pure or applied science, together with some research experience is essential.

Initial salary, depending on age and experience, would be in a range up to £3,617 per annum (at present under review) plus U.S.S. benefits.

Applications, giving a curriculum vitae and the names of three referees, quoting reference 319/R/THES to D. A. S. Copland, University of Southampton, Southampton SO9 5NH.

LONDON

THE UNIVERSITY

READERSHIP IN MINERAL INDUSTRY AT IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY

The Senate invites applications for the Readership in Mineral Industry tenable in the Department of Mineral Resources Engineering. The Reader will be required:—

(1) To initiate and carry out research into mineral industry problems related to mineral economics.

(2) To undertake the supervision of a postgraduate MSc course for mining engineers involving application of business techniques and economics in the exploitation of mineral deposits.

(3) To teach mineral economics to postgraduate and undergraduate students.

A good honours degree in a relevant discipline combined with industrial experience and an interest in teaching is required.

Salary scale £6,443 to £7,951 plus £350 London Allowance. Applications (10 copies) must be received not later than 14th November, 1977, by the Academic Registrar, University of London, Senate House, London WC1E 7HU, from whom further particulars should first be obtained.

LONDON

THE UNIVERSITY

CHAIR OF SCIENCE EDUCATION AT THE INSTITUTE OF EDUCATION

The University of London Institute of Education is seeking applications for a chair of Science Education newly established in the Department of Science Education. It is hoped that the professor, as head of the department, would not only build on its substantial experience in the initial training of graduates and in curriculum studies, but that he or she would, especially, develop advanced work and research related to some aspects of the Institute's distinctive strength in the fields of educational sociology, history, philosophy and psychology.

Applications (10 copies) should be received not later than 27 October 1977 by the Academic Registrar (THES), University of London, Senate House, London WC1E 7HU, from whom further particulars should first be obtained.

NEW ZEALAND

MASSEY UNIVERSITY

Palmerston North, New Zealand

LECTURER in SOCIOLOGY

Applications are invited from suitably qualified persons for this new position in the Department of Sociology. Persons with postgraduate qualifications in any area of Sociology will be considered, though special consideration may be given to applicants with qualifications and experience in deviance, criminology or the sociology of medicine.

The appointee will also be required to assume some responsibility for extra-mural teaching as directed by the Head of Department.

LECTURER IN SOCIAL WORK

Applications are called for from suitably qualified persons for this new position in any area of social work in the Department of Sociology Social Work Unit. Special preference, however, may be given to applicants with qualifications and experience in either the field of disability and working with the disabled in the community, or in social work with the ageing.

Salary: In the current range of NZ$10,239 to NZ$12,543.

Further details of the position, and of the University, together with conditions of appointment and information to be supplied by applicants, may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or the Registrar of the University.

Applications close on 4th November, 1977.

SURREY

THE UNIVERSITY

LECTURER IN CATERING

Applications are invited from suitably qualified men and women for the above post.

Candidates will be required to contribute to the undergraduate course in Hotel and Catering Administration and a knowledge and experience of various forms of food preparation and production, with suitable industrial experience is essential. Previous experience in technical teaching and experimental work would be an advantage.

Salary will be within the range £3,333 to £6,655 per annum, according to qualifications and experience, with superannuation under U.S.S. conditions.

Further particulars of the post may be obtained from the Academic Registrar (T.F.G.), University of Surrey, Guildford, Surrey GU2 5XH, or telephone Guildford 71281, extension 452. Applications, in the form of a curriculum vitae, including the names and addresses of two referees, should be sent to the same address by 31st October, 1977.

BEDFORD

CRANFIELD INSTITUTE OF TECHNOLOGY

LECTURER IN SOCIAL POLICY

Lecturer required to teach and supervise professionally experienced students from the public and voluntary services developing MSc research theses in social policy and institutions.

Candidates should have working experience in a field of social policy and a knowledge of social theory and research methodology. They should be able to apply that experience and knowledge to help students develop practical research projects.

University lecturer scale (with U.S.S.).

Further details and application form from the Secretary (Appointments, 671/G), Cranfield Institute of Technology, Cranfield, Bedford, MK43 0AL (Telephone 0234 750111), to whom application forms should be returned not later than 31st October.

NEWCASTLE UPON TYNE

THE UNIVERSITY

REGISTRAR'S DEPARTMENT

SENIOR ASSISTANT REGISTRAR

Applications are invited from graduates, men and women, for Two Posts of Senior Assistant Registrar.

Post A is concerned primarily with Personnel, Industrial Relations and Establishment work and is for appointment as soon as possible.

Post B is concerned primarily with administration in the Faculty of Medicine including the Dental School and is for appointment with effect from 1st October 1978.

Salary for both posts will be at an appropriate point on Grade III of the National Scale for Administrative Staff, £6,443 to £7,951 per annum, according to age, qualifications and experience. Membership of the appropriate University superannuation scheme will be required.

Further particulars may be obtained from The Registrar, The University, Newcastle upon Tyne NE1 7RU with whom applications (3 copies) specifying which post, together with the names and addresses of three persons to whom reference may be made, should be lodged not later than 25th November 1977. Please quote reference THES.

SHEFFIELD

THE UNIVERSITY

UNIVERSITY LIBRARY

ASSISTANT LIBRARIAN GRADE IA

Applications are invited from men and women who are professionally qualified librarians for the above post, from 1 November, 1977. The post is within the Cataloguing Section and is likely to be a subject specialist post in the Social Sciences. Among the chief duties will involve the maintenance, development of the official and government publications collections and their use, including instruction and assistance for both staff and readers. Initial salary in range £3,333 to £3,975 on S.L. [illegible] scale rising to £6,655 a year plus superannuation.

Particulars from the Registrar and Secretary, the University, Sheffield S10 2TN, to whom applications (three copies), with names of two referees, should be sent by 21 October, 1977. Quote Ref. R.567/DL.

SOUTH AFRICA

UNIVERSITY OF THE WITWATERSRAND
Johannesburg

DEPARTMENT OF EDUCATION

SENIOR LECTURER

Applications are invited from suitably qualified persons for the above post. Those appointed will have particular [illegible] the sociology of [illegible]. Duties are to be assumed as soon as possible.

The salary scale attached to the post of [illegible] plus 10 per cent pensionable allowance. The initial salary will be determined according to qualifications and experience. [illegible]

The University's policy is not to discriminate in the appointment of staff or the selection of students on the grounds of sex, race, religion or colour. Further particulars relating to this practice are included in an information sheet obtainable from the London Representative, University of the Witwatersrand, 278 High Holborn, London WC1V 7HE, or the Registrar, University of the Witwatersrand, Jan Smuts Avenue, Johannesburg, South Africa, 2001, with whom applications should be lodged not later than 7th November 1977.

SOUTH AFRICA

UNIVERSITY OF THE WITWATERSRAND
Johannesburg

DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES

JUNIOR LECTURER/ASSISTANT LECTURER

Applications are invited for appointment to the above post. Applicants should be suitably qualified in a major field of either physical or human geography.

The salary range is: Junior Lecturer: R5,640 to R5,340 plus a 10 per cent allowance; Assistant Lecturer: R4,020 to R6,300 plus a 10 per cent allowance (£1 equals R1.60 approximately). The initial salary and level of appointment is dependent upon the qualifications and experience of the successful applicant.

The University's policy is not to discriminate in the appointment of staff or the selection of students on the grounds of sex, race, religion or colour. Further particulars relating to this practice are included in an information sheet obtainable from the London Representative, University of the Witwatersrand, 278 High Holborn, London WC1V 7HE, or the Registrar, University of the Witwatersrand, Jan Smuts Avenue, Johannesburg, South Africa, 2001, with whom applications should be lodged not later than the 31st October, 1977.

HULL

THE UNIVERSITY

VICE-CHANCELLOR

The Council and Senate of the University of Hull have appointed a Joint Committee to select a Vice-Chancellor to succeed Professor B. R. Jones, C.B.E., M.A., who retires on September 30, 1979.

The Chairman of Council invites applications for the office and interested persons, who in the first instance, may write to him privately. He would also welcome suggestions which might be considered for the office. Correspondence should be addressed to him, c/o Mr. N. Heckitt, The Registrar, The University, Hull, HU6 7RX, preferably by December 31, 1977.

Further particulars may be obtained from the Registrar.

Polytechnics

Faculty of Business, Barking Precinct

Lecturer Grade II (Faculty Post)

The Faculty seeks to appoint a lecturer to assist in the development of its part-time educational programmes. An appropriate degree or qualification, and work experience in the general fields of business or management is required. An interest in audio-visual learning systems would be an advantage.
(Ref S/AO 306A)

Department of Accounting and Finance

A Principal Lecturer

is required to undertake senior academic and administrative responsibilities in a Department offering degree and professional courses in Finance and Accounts. A professional accounts qualification and experience is essential; a relevant higher degree is expected.
(Ref. S/AO 306B)

Lecturer II/Senior Lecturer Appointment

Lecturer sought to undertake teaching of economics on Degree courses: Accounting and Finance and other Accounting courses. Appropriate Degree, with particular interest in Managerial economics, required; higher degree and/or relevant industrial experience desirable.
(Ref. S/AO 306C)

Department of Systems and Computing Studies

Lecturer II Appointment

Applicants for this post should have recent commercial, industrial or teaching experience from among the areas of information systems, database technology and operating systems. Appropriate academic qualifications required and experience of ICL 1900 series would be an advantage.
(Ref. S/AO 306D)

Department of Student Services, Barking Precinct

Lecturer II in Physical Education

The Polytechnic wishes to appoint a specialist in Physical Education from January 1, 1978. The person appointed will be required to teach and promote participation in a broad recreational programme and there may be opportunities for candidates to work with other Departments in the Academic field and to develop such work for which they may be specifically qualified. Candidates should have some knowledge of the administration of adult recreation: good teaching experience; a professional qualification in Physical Education and a degree would be desirable.
(Ref. S/AO 306E)

Salary Scales:

Lecturer II	£3,279-£5,493
Senior Lecturer	£5,031-£6,417
Principal Lecturer	£5,940-£7,578

(plus appropriate Government Supplements of up to a maximum of £402 and appropriate London Allowance).

Further details and application form from:—
The Senior Staffing Officer (2)
North East London Polytechnic,
Forest Road, London E17 4JB.
Telephone 01-527 2272 (Extension 20).

Closing date October 17, 1977. Please quote appropriate Ref No.

NELP North East London Polytechnic

KINGSTON POLYTECHNIC

School of Mechanical, Aeronautical and Production Engineering

Applications are invited for the post of

LECTURER II IN MECHANICAL ENGINEERING

to teach Applied Mechanics and other subjects related to Manufacturing and Design Engineering. Applicants should have a degree and preferably some industrial experience.

Salary range £3,888-£6,102 plus award in accordance with current pay policy.

Further details and application forms (to be returned by 24 October) from Academic Registrar, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames KT1 2EE, 01-549 1366.

MANCHESTER

THE POLYTECHNIC

JOHN DALTON FACULTY OF TECHNOLOGY

DEPARTMENT OF POLYMER TECHNOLOGY

LECTURER I IN DENTAL TECHNOLOGY

Applicants should have wide experience of, and be well-qualified in, general dental technology, with advanced qualifications in at least one speciality. Previous teaching experience desirable.

The successful candidate will be required to teach dental technology to Advanced level and should be capable of contributing to the development of new courses in the department.

Salary scale: £2,409 to £4,277 plus up to £402 per annum supplements.

For further particulars and application form (returnable by October 21, 1977), please send a self-addressed envelope marked "T/405" to the Secretary, Manchester Polytechnic, All Saints Building, Manchester M15 6BH.

CITY OF BIRMINGHAM

THE POLYTECHNIC

DEPARTMENT OF CONSTRUCTION AND SURVEYING

LECTURER II/SENIOR LECTURER
ESTATE MANAGEMENT

Applicants should be graduates in estate management or holders of a cognate degree and/or corporate members of the Royal Institution of Chartered Surveyors (General Practice Division), and able to teach estate management and associated subjects to final level of R.I.C.S. and the exempting full-time diploma course.

Salary Scale: Lecturer II, £3,279 to £5,493; Senior Lecturer, £5,031 to £6,055 (bar at £6,417). Plus 1976 and 1977 supplements.

Further details and application form (to be returned by the 24th October, 1977) from: The Personnel Officer, City of Birmingham Polytechnic (THES), 1 Block, Perry Barr, Birmingham B42 2SU. Telephone number 021-356 6911, extension 217.

RICHMOND COLLEGE LONDON

TUTOR IN BUSINESS STUDIES

The Governors invite applications for the post of Tutor in Business Studies in this rapidly expanding independent university college which is licensed to award the AA degree by the Board of Higher Education in Washington DC and is a candidate for accreditation with the Middle States Commission for Higher Education. The College has a multi-national student body of approximately 350.

The post requires the teaching of 15 hours of Business Studies per week together with counselling duties. Candidates must have a good degree in Business Studies, experience of degree-level teaching, preferably using the case study method, and course planning.

Salary scale, £3,500 by £250 to £5,000 p.a.

Application forms may be obtained from The Principal, Richmond College, Queens Road, Richmond, Surrey, and should be returned as soon as possible.

SPORT

Director – Northern Ireland Institute of Coaching

Salary: £6,432-£8,070 (inclusive of all supplements)

Applications are invited for the post of DIRECTOR of the NORTHERN IRELAND INSTITUTE OF COACHING.

The Institute has been jointly established by the Sports Council for Northern Ireland and the Northern Ireland Polytechnic for the development of coaching in sport and physical recreation in Northern Ireland. The person appointed will be based at the Northern Ireland Polytechnic.

Further information and an application form can be obtained from:
**The Secretary,
Northern Ireland Institute of Coaching,
c/o The Establishment Officer,
Ulster College.
The Northern Ireland Polytechnic,
Jordanstown,
Newtownabbey.**

Completed application forms to be returned by 28th October, 1977.

THE POLYTECHNIC, HUDDERSFIELD

Department of Accountancy and Professional Studies

Principal Lecturer/Senior Lecturer or Lecturer II in Accounting

ACA/149/162

Vacancies exist for Lecturers to join a progressive department offering teaching opportunities at degree, advanced professional and post-experience levels. A professional accounting qualification and a first or higher degree are desirable. Grade of appointment will be dependent on qualifications and experience.

Staff are expected to undertake activities, including research, in addition to teaching duties.

Salary:
PL £6,432-£7,134 (Bar)-£8,070 per annum
SL £5,523-£6,447 (Bar)-£6,909 per annum
LII £3,744-£5,985 per annum

Further details and application forms, which should be returned by October 21, 1977, from the Establishment Office, The Polytechnic, Queensgate, Huddersfield HD1 3DH (telephone 0484 22288, extension 2226).

SHEFFIELD CITY POLYTECHNIC
Department of Modern Languages
RESEARCH ASSISTANT
APPLIED LINGUISTICS

Applications are invited from persons with suitable qualifications in applied linguistics for a Research Assistantship in Applied Linguistics. A major contribution will be made to a group research project, supported by the Nuffield Foundation, investigating ways of improving methods of assessment of oral proficiency in modern languages degree courses. Some groundwork has already been completed and after the appointment of the successful candidate work will concentrate on a detailed examination of the performance of examiners and examinees at Sheffield City Polytechnic on the basis of tape recordings already made and data still to be collected.

Duties will commence as soon as possible.

The appointment will be for nine months only at a salary of £2,529 per annum.

A part-time appointment may be considered.

Requests for an application form in writing only please to the Personnel Department, Sheffield City Polytechnic, Halfords House, Fitzalan Square, Sheffield S1 2BB to whom completed forms should be returned by October 21, 1977.

Please quote ref. THES.

PLYMOUTH POLYTECHNIC

Arts and Humanities Teaching Group

RESEARCH ASSISTANT PHILOSOPHY

Candidates should have a good honours degree in Philosophy: a special interest in Philosophy of Education and/or Philosophy of Science would be an advantage.

Research Assistants are normally required to register for a higher degree, although post doctoral applicants will be considered. Appointments are for a period of two years with a possibility of a third year (fixed term contracts). Salary will be £2,469 for post graduates or £2,721 post doctoral (or equivalent) with annual increments of £126. Supplements of £444 p.a. are also payable.

Application forms to be returned by 21st October, 1977, can be obtained with further particulars from the Personnel Officer.

PLYMOUTH POLYTECHNIC, DRAKE CIRCUS, PLYMOUTH PL4 8AA

The Polytechnic seeks to appoint a

Dean of Students

to have general responsibility for student matters as a whole. Candidates must have substantial experience in higher education and be aware of current trends in student affairs. The post is vacant as from 1st January, 1978.
(Ref S/AO 305)

Salary: Head of Department Grade VI—£8,037-£8,913. (Plus London Allowance of £402 and appropriate Government Supplements.)
Further details and application form from:
The Senior Staffing Officer (2)
North East London Polytechnic
Forest Road, London E17 4JB
Telephone 01-527 2272 (extension 20)
Completed applications must be returned by Friday, 21st October, 1977. (Interviews will be held on Monday, 31st October, 1977.)

NELP North East London Polytechnic

Assistant Director (Finance)

Salary: c. £11,800 p.a. incl.

Accountants with experience of higher education are invited to apply.

Dean of Business Studies and Management

Salary: £9,096-£9,972 p.a. incl.

Exceptional ability and experience in the area are required for this senior academic role.

Please request further information of: R. P. Hornung, Clerk to the Governors, Middlesex Polytechnic, Bounds Green Road, London N11 2NQ.
Closing Date 28th October – quote ref

Middlesex Polytechnic

LANCHESTER POLYTECHNIC

Coventry – Rugby

FACULTY OF SOCIAL SCIENCE

Applications are invited for the post of:

Head of Department

DEPARTMENT OF BUSINESS STUDIES

The vacancy occurs on the promotion of Dr P. Stonham—now Deputy Director at the Dorset Institute of Higher Education.
Salary: Head of Department Grade V £7,395-£8,271 per annum plus £312 plus £180 supplements (up to a maximum of £8,680 per annum).
Application forms and further particulars are available from the Director, Lanchester Polytechnic, Priory Street, Coventry CV1 5FB returnable by 31st October, 1977.

NORTH LONDON

THE POLYTECHNIC

FACULTY OF ECONOMIC AND ADMINISTRATIVE STUDIES

LECTURER (GRADE II) IN STATISTICS AND/OR OPERATIONAL RESEARCH

Applicants should hold an honours degree or equivalent in relevant subjects and preferably a higher degree. Industrial experience would be an advantage.

The successful applicant will be required to teach on the B.A.(Hons.) Accounting Degree Course, various other accounting courses and on the course for membership of The Institute of Statisticians.

Salary Scale, £3,146-£6,387 (inclusive of London Allowance).

(Start at the top of the Lecturer (Grade II) scale can permit progression to the Senior Lecturer scale subject to satisfying an efficiency requirement.)

Application forms and further particulars can be obtained from the Establishment Officer, The Polytechnic of North London, Holloway Road, N7 8DB. Telephone 01-607 2789, Extn. 2013.

Closing date, 14 days from the appearance of this advertisement.

KINGSTON

THE POLYTECHNIC

SCHOOL OF ECONOMICS AND POLITICS

RESEARCH ASSISTANT IN ECONOMICS

Applicants should have a good degree in Economics. Familiarity with Quantitative Methods essential. Some previous computer usage an advantage.

The person appointed will be required to assist in a macroeconometric investigation of the effectiveness of monetary and fiscal policies with particular reference to "crowding-out".

Salary range £2,673 to £3,830. Appointment to start as soon as possible.

Further details and application forms (to be returned by 24th October) from Academic Registrar, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames KT1 2EE. 01-549 1366.

LONDON

CITY OF LONDON POLYTECHNIC

LIBRARY AND LEARNING RESOURCES SERVICE

TECHNICAL SERVICES LIBRARIAN

(I.L.E.A. Librarian I)

ARCHIVES AND SPECIAL COLLECTIONS LIBRARIAN

(I.L.E.A. Librarian I)

Salary scale: £5,717 to £6,602 including London Weighting and Phase II settlement.

Applications are invited from chartered librarians for the above two posts.

The Technical Services Librarian will be in charge of the cataloguing, acquisitions and serials departments. Knowledge and experience of M.A.R.C., of technical services and computer-based systems is essential as is management experience.

The Archives and Special Collections Librarian will preserve, organise and develop the Polytechnic archives and Special Collections it administers, including the Fawcett Collection on Women.

Application forms and further details for both posts are available from The Assistant Secretary, City of London Polytechnic, 117-119 Houndsditch, London, EC3A 7BU to be returned by 31 October 1977.

Candidates should state clearly on the form for which post they are applying.

Personal

POSTALOANS UNSECURED

£50-£1,000

RICHMOND INVESTMENTS LTD.

4 The Green, Richmond, Surrey 01-940 5558/9

Polytechnics continued

NEWCASTLE UPON TYNE POLYTECHNIC

RESEARCH ASSISTANTS

(£2,440-£2,800 plus £312 and £152 p.a. salary supplements)

DEPARTMENT OF MODERN LANGUAGES

The post will involve research in the field of European Community regional policies and their implementation in France and the U.K., and possibly West Germany.

Applicants should have a good Honours degree in Economics with French, or in Modern Languages/European Studies with an appropriate social science, preferably Economics. The project will be supervised in collaboration with the Department of Economics.

DEPARTMENT OF ELECTRICAL ENGINEERING AND PHYSICAL ELECTRONICS

A research assistantship is available for a candidate to join one of the following groups.

Thin Film Devices Group
The group is actively investigating a wide range of thin film devices from optical filters to solar cells. The successful applicant would undertake a study of fundamental structural properties of vacuum deposited thin films important in these devices, using a variety of techniques including optical interferometry and electron microscopy.

Applied Acoustics Group
This group has made a special study of traffic noise. The research assistant will be required to assist both in this work and also in an extension into other areas of noise measurement.

DEPARTMENT OF SURVEYING AND CONSTRUCTION

Required to work on a project consisting of the experimental investigation and theoretical modelling of the air velocity distribution in air conditioned spaces.

Applicants should have a good Honours Degree in Engineering, Physics or Mathematics with special interests in Fluid Mechanics and Computing.

The successful candidate will be expected to register for a higher degree. The Assistantships are initially for a fixed period of two years.

For further particulars and application forms returnable by Monday, 24th October, 1977, please send stamped addressed foolscap envelope to the Staffing Officer, Newcastle upon Tyne Polytechnic, Ellison Building, Ellison Place, Newcastle upon Tyne NE1 8ST.

LEICESTER
THE POLYTECHNIC
SCHOOL OF BUILDING, SURVEYING AND LAND ECONOMY

Applications are invited from suitably qualified persons for teaching appointments on degree and sub-degree courses in :

(a) BUILDING (post No. 537)
and
(b) SURVEYING (post No. 513)

In addition to Construction Technology an interest in one of the following areas is desirable :

(i) Structural surveying and structural analysis related to buildings ;

(ii) Building Services, i.e., sanitary plumbing, drainage, environmental studies ;

(iii) Land surveying and cartography ;

(iv) Building Management.

Salary Scale : Lecturer Grade II/Senior Lecturer, £3,735 to £4,419—£4,962 to £5,787 inclusive, Lecturer Grade I £5,787 to £6,615 inclusive, depending upon qualifications and previous experience.

Forms of application and further particulars available from : Bursar, The Polytechnic, Leicester LE1 9BH.

Department of Art

LONDON
UNIVERSITY OF LONDON GOLDSMITHS' COLLEGE
SCHOOL OF ART AND DESIGN
New Cross, London SE14 6NW

Applications are invited for the post of :—

SENIOR LECTURER II IN PRINTED ARTS, DYED TEXTILES

In the Embroidery and Textiles Department.

Applicants should have extensive knowledge of, and experience in, the field of textiles (hand printing and printing and should be well versed in some of the subject to honours degree level.

In addition to his/her teaching and administrative responsibilities the successful applicant will be expected to play a full part in the development of the Department for the specialised fields of study.

Salary scale for Senior Lecturer on Scales of Salaries for Teachers in Establishments for Higher Education, London Allowance payable.

Write for further particulars, enclosing a stamped addressed medium size envelope to the Personnel Officer to whom applications should be sent by 21st October, 1977.

BUCKINGHAMSHIRE
COUNTY COUNCIL
EDUCATION DEPARTMENT
BUCKINGHAMSHIRE COLLEGE OF HIGHER EDUCATION
High Wycombe
Director : J. Tweed, B.A., Ed.Dipl.

SCHOOL OF HUMANITIES

Temporary LECTURER Grade I in HISTORY

Required from 1st January, 1978, until 31st August, 1979. The appointment will be restricted to work in History mainly at A level but with some work at Diploma in Higher Education level.

Salary scale : £2,925 to £5,601.

Applicants should possess a good Honours Degree. A further degree and/or teaching experience would be desirable.

Application forms and further details from the Director, to whom applications should be sent by 31st October, 1977.

ESSEX
CHELMER INSTITUTE OF HIGHER EDUCATION
Victoria Road South, Chelmsford CM1 1LL
(Tel. : Chelmsford 265021)

FACULTY OF SOCIAL SCIENCE

DEPARTMENT OF PLANNING

PRINCIPAL LECTURER and LECTURER B

required as soon as possible.

Applicants should have suitable qualifications and experience for the above posts which arise as a result of the expansion of a developing and progressive department.

A particular interest and/or qualification in one or more of the following fields is required :
Local Planning with experience in small/medium town practice ;
Social Statistics—Demography with a strong practice background ;
Metropolitan Planning.

For the post of Principal Lecturer, experience of academic administration essential.

For the second post, recent experience in practice important.

The Department offers a part-time Graduate Diploma course which is recognised as giving exemption from R.T.P.I. Final Examinations. A full-time Undergraduate Planning course commenced in 1975 for which C.N.A.A. validation is being sought.

Personal graduate studies and research encouraged.

Salary scale : Principal Lecturer, £9,255 to £10,020 per annum, Chief at £7,335 ; Senior II, £6,744 to £8,406 per annum.

Application form and further details from the Secretary, to be returned within 21 days after the appearance of this advertisement.

Research

SUNDERLAND
THE POLYTECHNIC
FACULTY OF ENGINEERING
DEPARTMENT OF MINING
TYNE-WEAR ENGINEERING GEOLOGICAL MAPPING PROJECT

RESEARCH OFFICER

Salary scale : £2,385 to £2,721 plus £117 supplement

Applications are requested for the post of Research Officer in the above established which is run jointly with the Lithoteque Tyneaise Unit of Newcastle University. The work includes the compilation of a library of engineering geological information and the development of a series of engineering geological maps of the Tyne and Wear County. Suitably qualified graduates in geology, mine geology, civil engineering or environmental sciences will be considered for the post which is a non-establishment one for a maximum of three years.

FACULTY OF HUMANITIES
HISTORICAL ASSESSMENT IN RELIGION AND CONTEMPORARY CULTURES

Salary scale : £2,655 by £120 to £2,787 per annum

The Sunderland Polytechnic team studying Religion and Contemporary Culture requires a research assistant to undertake a study of environment in Community and Secular Values in Scotland and Northumbria.

The study includes a survey of the results of the Report of the Church Commission on the Church in Sunderland and Newcastle, Community Project Analysis in Scotland.

The successful candidate will be required to work closely with the team leader, with the assistance of a secretary, in the collection of data and its analysis. Further details and an application form may be obtained from the Personnel Officer, Sunderland Polytechnic, Langham Tower, Ryhope Road, Sunderland SR2 7EE, and should be returned as soon as possible.

Fellowships and Studentships

NOTTINGHAM
THE UNIVERSITY
SCHOOL OF AGRICULTURE
Sutton Bonington
Loughborough

POST DOCTORAL FELLOWSHIP
REPRODUCTIVE PHYSIOLOGY

Applications are invited for the post-doctoral fellowship to study research into investigations of aspects of ovarian function, including ovary, knowledge of immunological procedures is desirable. The appointment will be for a period of 2 years in the first instance.

Further particulars and a form of application may be obtained from the undersigned, to whom applications should be submitted by Friday, 14th October 17, 1977.

PAISLEY COLLEGE
DEPARTMENT OF MECHANICAL AND PRODUCTION ENGINEERING

RESEARCH STUDENTSHIPS

Applications are invited from graduates with a good Honours degree in Mechanical or Production Engineering or a related discipline.

Suitable applicants would be expected to research for either an M.Phil. or Ph.D. of C.N.A.A.

Vacancies exist in the following fields :—

1. **Electrochemical Engineering :**
   Control of metal distribution in electroforming.
   Electrodeposition of compositos.
   Electrochemical production of alloys.
2. **Pressure vessel design concepts.**
3. **Prediction and reduction of machinery noise.**

Further details and application forms may be obtained from Professor J. Anderson, Department of Mechanical Engineering, Paisley College of Technology, High Street, Paisley PA1 2BE.
Those applying should state their field of interest.

Colleges of Further Education

EDINBURGH
DUNFERMLINE COLLEGE OF PHYSICAL EDUCATION

Applications are invited from suitably qualified and experienced teachers for the following posts :—

(1) LECTURER in SPECIAL EDUCATION/MOVEMENT

Qualification in Special Education and experience of working with handicapped people essential ; movement qualifications/experience an advantage.

(2) LECTURER in SCIENCE of MOVEMENT

A graduate in Science or Physical Education with experience in teaching either biology/physiology/psychology or in applying scientific principles to studies in movement is preferred, but applications are also invited from those with appropriate experience or other qualifications in Physical Education alone.

(3) LECTURER in EDUCATION

Qualifications in Psychology essential ; specialist knowledge in (a) the development and learning of perceptual motor skills and/or (b) cognitive psychology an advantage.

All posts will take effect as soon as possible but posts (2) and (3) will be temporary appointments for one year in the first instance.
Salary will be on the following scale in accordance with qualifications and experience—£3,520-£6,807.
Further information and application forms may be obtained from the Principal, Dunfermline College of Physical Education, Cramond Road North, Edinburgh EH4 6JD. Completed forms should be returned by 21st October, 1977.

Coombe Lodge

The Further Education Staff College, Blagdon, Nr. Bristol

REPORT EDITOR

Required to write and prepare for publication material arising from seminars and other activities of the College.

Salary within range £2,469-£3,801.
Paycode I & II settlements

Further particulars from the Registrar at the above address.

CAMBRIDGESHIRE
COLLEGE OF ARTS AND TECHNOLOGY

The following posts are tenable from 1 January, 1978. Applicants should quote the details. The number is Cambridge 67871 Ext. 76 for Secretary English, Ext. 56 for Secretary and Ext. 704 for Telecommunications. Forms should be returned at once.

LECTURER IV ENGLISH to teach twentieth century literature at degree level with additional teaching in General and Communication Studies. Candidates should have a first in English and preferably research experience. Salary : £3,915 to £4,869, starting point dependent on qualifications and experience.

LECTURER II SECRETARY to teach G.N.A.A. degree and H.N.D. level students. Applicants should have a good degree in Secretarial Studies, the ability to teach Executive Administrative and Secretarial Theory. Some teaching and research experience would be an advantage but neither is considered essential. Salary : £3,013 to £1,860, starting point depending on qualifications and experience.

LECTURER II IN TELECOMMUNICATIONS to teach in courses for H.N.C., H.N.D., C.E.I., Part III, and possibly a G.N.A.A. degree. Candidates should have an appropriate degree and relevant industrial experience. Research experience and evidence of research potential would be an advantage. Experience in multiplexing techniques, digital techniques and engineering applications of microprocessors at an advanced level although this is not essential. The post will be graded as for all appointments to the Staff. Classes and equipment of the college are modern and well equipped. Salary scale £3,444 to £4,407 inclusive, £4,962 to £5,787 inclusive, £6,525 to £8,247 inclusive, depending on qualifications and experience. Initial appointments will normally be at the minimum of the scale with transfer to the next scale on reaching 21 years.

Colleges of Education

THE CITY OF LIVERPOOL
COLLEGE OF HIGHER EDUCATION
(C. U. Non Voap)

Applications are invited for the following posts :—

LECTURER II IN SOCIAL STUDIES/ECONOMICS

LECTURER II IN ENVIRONMENTAL PSYCHOLOGY

The successful candidate will be expected to contribute to the teaching of Social Studies and Economics to B.Ed. Honours and B.Sc. (Econ.) Honours degree students. Candidates should possess a first or upper second class honours degree in Economics and a particular interest in environmental psychology. He/she should be most suitable for appointment if he/she is willing to undertake research into some aspect of Cognitive Psychology.

Salary Scale : £3,744 to £4,407 (Inc. to £5,085.

Further details and application forms from : The Principal, Liverpool College of Higher Education, Liverpool Road, Prescot, Merseyside L34 1NP.

The closing date for applications, October 14th, 1977.

CREWE AND ALSAGER
COLLEGE OF HIGHER EDUCATION
FACULTY OF HUMANITIES

Required as soon as possible LECTURER II IN FRENCH (Female) Temporary appointment for two years, with possibility of subsequent appointment at the end of that period.

The successful candidate will be required to possess a high academic qualification in one of French, Spanish, or other appropriate language, and to be able to teach French to Advanced level.

Further details and application forms from the Head Director's Secretary, Crewe and Alsager College of Higher Education, Alsager, ST7 2HL. Closing date 21st October 1977.

LANCASHIRE
EDGE HILL COLLEGE OF HIGHER EDUCATION
Ormskirk

(1) SENIOR AREA OF LITERATURE AND DRAMA

Required for January 1, 1978 (or earlier if possible) LECTURER II in ENGLISH LITERATURE to contribute to B.Ed. and B.A. courses.

Candidates should be young graduates, preferably in their late twenties, with a good honours degree in English Literature, high academic qualifications, and research qualifications. They should be able to make a lively and stimulating contribution to the literature area of the English studies.

(2) JUNIOR AREA OF MATHEMATICS

Required for January 1, 1978 (or earlier if possible) LECTURER II in MATHEMATICS to contribute to B.Ed. and B.A. courses. Applicants should have experience of school mathematics and work in Computer Studies and an interest in Computer Assisted Learning. Assistance will be given in attending courses for the re-training of teachers.

Application forms and further details available from the Director's Secretary.

Closing date, October 21.

SOUTH GLAMORGAN
COUNTY OF
SOUTH GLAMORGAN INSTITUTE OF HIGHER EDUCATION
PRINCIPAL LECTURER—CHIEF LIBRARIAN

Salary : £6,930, plus £519 London Allowance, rising by £519 plus £519 London Allowance to £8,502 plus £519 London Allowance.

Applications are invited from suitably qualified persons for the post of Librarian to the Institution.

Post-holder will be given a candidate the opportunity of developing a library service to meet the needs of the Institution.

Candidates should have had supervisory experience in an academic library.

Application forms and further particulars from the Personnel Officer, Institute of Higher Education, Llantrisant Road, Cyncoed, Cardiff CF2 6XD, to whom completed forms should be returned within 21 days of the appearance of this advertisement.

J. J. Adams, Director of Education, Education Offices, Kingsway, Cardiff.

Administration

LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY

Administrative Assistant

Applications are invited from men and women with graduate or equivalent qualifications for the post of Administrative Assistant in the Department of Science. Duties will be concerned with the day-to-day administration of all aspects of the work in this large and active department.

Salary within scale £2,004-£5,697 (under review). It is hoped to appoint within the lower half of the scale. Postcard requests for further information and application forms to Paul Johnson, Establishment Officer. Ref: 77/32FB.

Loughborough Leicestershire

Western Australian Institute of Technology

WAIT is a major Australian tertiary education institution, with an internationally recruited academic staff whose duties are mainly related to teaching. At present there are over 11,000 students undertaking degree or diploma studies at both undergraduate and graduate levels. Academic programmes may be taken on a full-time, part-time or external study mode, and in general are vocationally oriented.

Academics wishing to work in a stimulating environment are invited to apply for the positions listed below.

School of the Arts and Design

Art and Design
Design
Tutor/Senior Tutor/Lecturer
Teach in one or more, depending on future needs, graphic or industrial design, design for film and television, craft design and printmaking. Applicants must be outstanding professional practitioners. Comprehensive visual documentation to be included with an application. (Ref. HE5 046)

History and Theory of Fine Arts and Design
Tutor/Senior Tutor/Lecturer
Teach and develop a program on the history and theory of fine art and design. Evidence of research and publications preferred. (Ref. HE5 048)

Art and Design
Painting
Tutor/Senior Tutor/Lecturer
Teach painting and able to demonstrate a high level of professional achievement as a painter. Visual documentation of professional work to be included with application. (Ref. HE5 047)

Sculpture
Senior Lecturer
Teach and administer the sculpture programmes and develop them with other major studies in the department. Visual documentation of professional work to be included with application. (Ref. HE5 045)

Architecture and Planning
Building Technology
Tutor/Senior Tutor/Lecturer.
Detailed knowledge of building materials, structural design and construction techniques required, with ability to relate them to Architectural Design and laboratory investigation. Experience of computer applications preferred. (Ref. HE5 049)

English
Theatre Arts
Lecturer/Senior Lecturer
Teach and develop courses in Theatre Arts. Share in the artistic direction of production and performance work in WAIT theatres. Practical drama experience essential. (Ref. HE5 050)

School of Engineering and Surveying

Civil Engineering
Hydraulics
Tutor/Senior Tutor/Lecturer
Teach Hydraulics and supervise tutorials, laboratories and project work. Also depending on level of appointment to organise and lead subject area. Research interest also required. (Ref. HE5 041)

Civil Engineering
Tutor/Senior Tutor/Lecturer
Teach Hydraulics and also be able to assist in either Structural Analysis or Geomechanics. (Ref. HE5 042)

Public Health Engineering
Tutor/Senior Tutor/Lecturer
Teach water waste, water supply and hydrology. Research interest in one of these required. (Ref. HE5 043)

Electrical Engineering
Digital Electronics
Tutor/Senior Tutor/Lecturer
Teach digital systems and hardware, including application of mini computers and microprocessors, programmable instrumentation automated test equipment and data logging systems. (Ref. HE5 044)

School of Health Sciences

Medical Technology
Haematology
Tutor/Senior Tutor/Lecturer
Teach clinical laboratory diagnostic haematology and blood transfusion serology. (Ref. HE5 032)

Immunology
Senior Lecturer
Teach clinical immunology and be responsible for course development and leadership. (Ref. HE5 031)

Microbiology
Tutor/Senior Tutor/Lecturer
Teach medical microbiology and bacterial genetics. (Ref. HE5 033)

Pharmacy
Pharmaceutical Biology
Tutor/Senior Tutor/Lecturer
Teach biological aspects of pharmacy, including physiology/pharmacology and/or microbiology/chemotherapy. Supervise UG and PG project work. (Ref. HE5 034).

Therapy
Behavioural Science
Senior Lecturer
Teach behavioural science in the School's degree programmes, and assist in the development of graduate studies. Experience in field of medical rehabilitation, and application of learning theory preferred. (Ref. HE5 037)

Occupational Therapy
Senior Lecturer
Teach in and co-ordinate OT degree programme. Assist in development of graduate studies. Qualification in education and/or applied research in OT preferred. (Ref. HE5 036)

Occupational Therapy
Tutor/Senior Tutor/Lecturer
Teach in OT degree course, and co-ordinate elements of the programme. Sound clinical background required. (Ref. HE5 038)

Therapy
Speech Pathology
Tutor/Senior Tutor/Lecturer
Organise the clinical education in Speech & Hearing Science degree course, including patient management in clinics on campus and in hospitals. Broad clinical experience required. (Ref. HE5 039)

Speech Pathology
Tutor/Senior Tutor/Lecturer
Teach in Speech & Hearing Science degree course. Sound clinical experience required, and experience in applied research in the area of medical rehabilitation preferred. (Ref. HE5 040)

Physiotherapy
Kinesiology
Tutor/Senior Tutor/Lecturer
Teach applied kinesiology. Expertise required in some or all following areas: biomechanics, motor learning, functional anatomy, recreation, exercise physiology, exercise therapy. (Ref. HE5 035)

School of Social Sciences

Library Studies
Tutor/Senior Tutor/Lecturer
Teach and develop courses in either Bibliographic Control or Bibliographical Organisation. (Ref. HE5 027)

Social Work
Senior Lecturer
Teach and develop courses in social work practice. Practical experience essential. (Ref. HE5 051)

Conditions include:
Salary Range: Senior Lecturer £12,447–£14,521, Lecturer £9,266–£12,186, Senior Tutor £7,966–£9,138, and Tutor £6,555–£7,732 (Salaries quoted at August 29th ratio of exchange £0.6826–$A1.00)

Qualifications: Senior Lecturer—A good higher degree and considerable experience, including tertiary teaching, are preferred. Lecturer—Post Graduate qualifications with experience, including teaching, are preferred. Senior Tutor/Tutor—A relevant degree with some industrial or teaching experience is preferred.
Leave: Annual, Long Service and Study Leave.
Superannuation: A choice of superannuation is available if required, including a scheme similar to FSSU. Transfer
Expenses: Fares for family plus assistance for removal expenses and temporary accommodation are payable to appointees.
Tenure: Appointment may be either tenured or non tenured for a period up to three years.

Applications:
Detailed applications, including a curriculum vitae and the names and addresses of three referees should be submitted not later than November 4th, 1977 to the Migration Liaison Officer, Western Australia House, 115 Strand, London WC2R 0AJ, England. A brochure containing further information may be obtained from the above address.

When applying please quote position and reference number.

Colleges of Higher Education

WEST SUSSEX
INSTITUTE OF HIGHER EDUCATION

Director : J. F. Wyatt, M.A. (Interviewing Bishop Otter College, Chichester, and Regular Visits College)

Applications are invited from suitably qualified persons for the following posts :

(1) PRINCIPAL LECTURER in charge of ENGLISH.

(2) LECTURER Grade II in HISTORY (Modern European History to teach to the B.Ed. course.

Details of the posts may be obtained from the Director, West Sussex Institute of Higher Education, The Bishop Otter College, Bishop Otter Hugh, Bognor Regis, West Sussex.

The closing date for applications will be 17th October, 1977.

WEST SUSSEX
INSTITUTE OF HIGHER EDUCATION

Director : J. F. Wyatt M.A. (Interviewing Bishop Otter College, Chichester, and Regular Visits College)

Applications are invited from suitably qualified persons for the following posts :

(1) PRINCIPAL LECTURER in charge of ENGLISH.

(2) LECTURER Grade II in HISTORY (Modern European History) to teach to the B.Ed. course.

Details of the posts may be obtained from the Director, West Sussex Institute of Higher Education, The Bishop Otter College, Bishop Otter Hugh, Bognor Regis, West Sussex.

The closing date for applications will be 17th October, 1977.

HEREFORD AND WORCESTER
COUNTY COUNCIL
WORCESTER COLLEGE OF HIGHER EDUCATION
Henwick Grove, Worcester WR2 6AJ

Applications are invited for an establishment of LECTURER in DATA and DATA BASE Management studies with effect from 1st January, 1978.

The person appointed will be required to assist with the teaching of courses common to the B.Sc. (Hons.) Business and C.N.A.A. and will be in practical supervision and dissertation work for the B.A. (Hons.) Course and the Postgraduate Diploma course.

Candidates should have appropriate practical training which will enable them to teach such topics on Data Base Systems. Good teaching experience is essential and the candidate must be able to contribute to theoretical and practical work at all levels up to the final year of B.Sc. degree courses.

The salary will be according to the Burnham Scale for Lecturer Grade II (currently £5,931 by £120 to £6,771 plus £117 London Allowance) with initial placement according to experience.

Further particulars and a form of application may be obtained from the undersigned, to whom applications should be submitted by Friday, 14th October, 1977.

Administration

LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY

Administrative Assistant

Applications are invited from men and women with graduate or equivalent qualifications for the post of Administrative Assistant in the Department of Science. Duties will be concerned with the day-to-day administration of all aspects of the work in this large and active department.

Salary within scale £2,004-£5,697 (under review). It is hoped to appoint within the lower half of the scale. Postcard requests for further information and application forms to Paul Johnson, Establishment Officer, Ref: 77/32FB.

Loughborough Leicestershire

General Vacancies

TECHNICIAN EDUCATION COUNCIL
Appointment of a full-time

EXTERNAL MODERATOR

The Council's external moderators play a key role in establishing and maintaining the standards of its awards by monitoring the operation of TEC programmes and assessment arrangements.

A full-time post is available immediately for a moderator who will be based in the London and Home Counties region. Applicants should have suitable experience relevant to either Sector A (Engineering and related subjects) or Sector B (Construction and related subjects).

The post may be filled by secondment from an existing post or by appointment to the Council's service.

Salary will be in the range equivalent to that of a Grade III Head of Department post in Further Education (£6,723-£7,515 per annum) plus a London allowance of £402 where applicable. Starting salary will depend on previous experience.

Further details of the above post may be obtained by writing to the Chief Officer (Ref. EM) at 76 Portland Place, London W1N 4AA. There are no application forms and candidates are asked to send a letter of application and curriculum vitae.

Closing dates for applications is Wednesday, 19th October, 1977.

EXPERIENCED EDITORS
required by
LAURENCE URDANG ASSOCIATES LTD.

Urdang prepare reference books at all levels for major publishers in Britain and the USA.

The successful candidates will be expected to help in the styling and proofreading of a major reference work; thereafter there will be opportunities to take part in the creative editing, writing, and administration of many new projects. We are looking for graduates with good editorial judgment, properly trained in editing and proofreading methods. Experience in phonetics and ability to type would be an advantage. We also have a vacancy for a recent graduate to train as an assistant editor.

Candidates should write, enclosing full curriculum vitae to:

Dr Alan Isaacs, Laurence Urdang Associates Ltd.,
2 Market House, Market Square, Aylesbury, Bucks.

ANTIOCH COLLEGE
YELLOW SPRINGS, OHIO

Applications are invited for the post of

DIRECTOR

of the College's London Centre for British Studies from April 1, 1978, or as agreed.

The Centre is an overseas unit of the above institution and offers courses in British Studies, Creative Writing and Humanistic Psychology to BA and MA levels.

Candidates should be graduates with teaching and administrative experience. Salary negotiable at about £9,000 according to qualification and experience.

Further particulars from Antioch Centre for British Studies, 46 Danbury Street, London N1.

Applications (with references) should be sent not later than October 31.

ROYAL COLLEGE OF VETERINARY SURGEONS

SECRETARY

required to assume responsibility for the College's Animal Nursing Auxiliaries Committee and all aspects of the work flowing from the college's administration of the ANA training scheme. The successful candidate should have the ability to prepare agendas, minutes and reports for the committee, to arrange examinations and also the patience to deal with numerous telephone and written enquiries concerning the training scheme. Ability to work unsupervised, together with high standards of shorthand and typing essential. It should be noted that trainees are instructed at approved training centres and not at the college itself. Commencing salary at age 25 or over is £3,474 p.a. on a scale rising by 8 annual increments to £4,647 p.a. inclusive of London weighting and salary allowance. L.V.'s provided.
Typed applications to the Registrar, 11 Belgrave Square, LONDON, SW1X 8QP.

LONDON, E.C.4
SOCIAL SCIENCE GRADUATES

Applications are invited from young social science graduates for a scientific officer post with the Social Science Research Council. The successful candidate will work as part of a team providing the secretariat for the economic and social history committee and the statistics committee of S.S.R.C.

The staff of the secretariat are not themselves engaged in research but provide support for the committee which assess applications for grants to support research projects being undertaken in universities and independent institutions and which are involved with a variety of other matters relating to research in the field which they cover.

Applicants should normally be under 27, have a good honours degree in the social sciences and should be interested in research and research administration. Some experience in administration or research would be an added advantage.

Salary scale, £3,075 to £4,511 per annum (including latest London Weighting and new supplement). Starting salary may be above the minimum depending on class of degree and experience. The hours of duty are 36 per week, excluding lunch hours and the leave entitlement is 20 days plus 12 public and privilege holidays. The council has the new non-contributory pension scheme.

Application forms and further details may be obtained from Mrs. Vera Highton (Ref. SO/11/HE), Social Science Research Council, Temple Avenue, London EC4Y 0HD. Telephone: 01-353 6262, ext. 114.

Closing date for applications: October 21.

MANCHESTER
THE TEXTILE INSTITUTE
CHIEF EDUCATION OFFICER

The Textile Institute invites applications from well-qualified persons of initiative and ability for the senior post of Chief Education Officer at its Manchester headquarters. The successful candidate must be able to relate to people at all levels in the education, training and industry worldwide. Salary in the range of £7,605 - £9,030.

Full job description from the General Secretary, The Textile Institute, 10 Blackfriars Street, Manchester, M3 5DR. Telephone 061-834 8157.

Courses

THE POLYTECHNIC OF CENTRAL LONDON
SCIENCE & TECHNOLOGY in C20 USA
October 26
A one day conference for schools and colleges on the history and future of the space programme and the impact of the computer on US society. Fee for students: 75p (others £2).

AMERICAN ART in C20
October 28/29
A conference for teachers and students to coincide with the Arts Council exhibition "The Modern Spirit: American Painting, 1908-1935" at the Hayward Gallery; conference includes films and visit to the Tate Gallery as well as the Hayward Gallery.
Further details of both from:
Netta Swallow,
Short Course Unit,
PCL, 309 Regent St.,
London W1R 8AL.
Tel: 01-580 2020 ext 221

LONDON
UNIVERSITY OF LONDON INSTITUTE OF EDUCATION
M.A. IN RIGHTS IN EDUCATION

This is an interdisciplinary course which began in October 1976 and is designed to examine the use of legislation and of educational practice to establish equal rights. Discrimination and inequality are considered in relation to class, race, sex and nationality. The major issues of the day are discussed, the increase awareness of rights, and the encouragement of legislation for rights and reform of educational practice. It is hoped to make clear the factors which give rise to inequality, such as boy-girl typing, racial and class discrimination which lead to inequality.

There is a core course dealing with international legal documents and constitutional rights and a choice of one of three options. The options are the disadvantaged, the rights of women's studies, and the rights of minorities.

The course will extend over two years part-time. There will be areas in some parts of the country for work of direct practical application.

The courses is open to graduates and non-graduates with appropriate educational experience. Apply for further particulars to Miss Lynda Hopkins, Lecturer, Rights in Education Studies Department, University of London Institute of Education, 20 Bedford Way, London WC1H 0AL.

READING
COLLEGE OF TECHNOLOGY
DEPARTMENT OF BUSINESS AND MANAGEMENT

Applications are invited for the post of PRINCIPAL LECTURER to serve as deputy to the Head of Department (Grade IV). The post is available with effect from 1st January, 1978, and relevant Further Education experience is essential. Particularly interested applicants may be asked to teach in any subject or cognate within the fields of business or Management Studies.

Further details and application forms from the Registrar, Reading College of Technology, Bridge Street, Reading, RG1 1LX. Closing date for receipt of completed application forms, 31st October, 1977.

Colleges of Higher Education

GWENT COLLEGE OF HIGHER EDUCATION
Faculty of Art and Design
(Formerly Newport College of Art and Design)

Applications are invited for the following full-time posts to commence on 1 January 1978.

Principal Lecturer
Head of School of Graphic Design

This is an important post and the person appointed will be based in a well established BA (Hons) course in Graphic Design and a Vocational Course leading to Dip SIA & D. Applicants expected to show proven ability as practising designers as well as qualities of leadership by example. Relevant administrative experience at degree level should also be offered by applicants. Salary in accordance with Burnham FE Scale £8,432-£8,920 inclusive of supplement of £160 p.a.).

Principal Lecturer
Art History and Complementary Studies

A suitably qualified person is sought to take charge of the History and Complementary Studies area within the Faculty of Art and Design. The Faculty offers BA (Hons) courses in Fine Art, Graphic Design together with advanced vocational courses. Salary in accordance with Burnham FE Scale £6,432-£8,092 inclusive of supplement of £160 p.a.) (but at £7,134). Progression to the next point dependant upon level of work undertaken.
Further details and application forms may be obtained from:
The Principal Administrative Officer,
Gwent College of Higher Education,
College Crescent,
Caerleon, Newport, Gwent NP6 1XJ. Tel. 0633 420321
to whom applications should be returned within 14 days from appearance of the advertisement.

Walsall Metropolitan Borough

West Midlands College of Higher Education

Applications are invited from candidates with good academic qualifications and experience for appointment as soon as possible to the post of

Senior Tutor

in this mixed College of Higher Education with graduate and postgraduate courses of teacher education validated by CNAA and with plans for diversified courses at present under consideration by that body. The post, which is a resident one with free board and accommodation, is third in seniority on the College establishment of academic staff and salary will be in accordance with the Burnham F.E. Scales, Head of Department Grade VI (£8,037-£8,913) plus supplement where appropriate.

Application forms and further particulars may be obtained from the Principal, West Midlands College of Higher Education, Gorway, WALSALL WS1 3BD, to whom they should be returned not later than 21st October, 1977.

Colleges and Institutes of Technology

DUNDEE COLLEGE OF TECHNOLOGY

LECTURESHIP IN BUSINESS STUDIES

Applications are invited from graduates or other suitably qualified persons, MARKETING and BUSINESS ADMINISTRATION are the main teaching areas of interest. Candidates should have had teaching, research, and/or business experience.

Salary on scale £3,688-£6,516 (bar)-£8,895 with allowance placing dependent upon prior approved experience. Financial assistance towards the cost of removal expenses may be payable.

Further particulars and application forms obtainable from the Administrative Assistant (Establishment), Dundee College of Technology, Bell Street, Dundee, DD1 1HG to whom completed application forms should be returned not later than 21st October, 1977.

Announcements

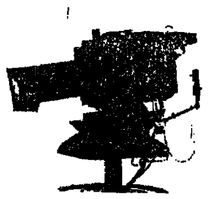
COMMUNITY-CUM-SPORTS CENTRE

Group with area of management experience sought for planning and running Sports Centre. Selected from Community Association, Psychotherapy, Youth, Arts and Drama. Applicants must be Members and possess Diploma in Community Work or Co-operative Housing Studies. Farnborough 44444, Cumberland House, London, End Lane, London.



Tom Burns has written a book on a decade in the life of the BBC which gives an account and an analysis of the changes that have taken place from 1963-1973.

Richard Hoggart, left, reviews this work of imagination and sociological analysis, making a plea for greater cooperation between social scientists and critics of the arts.



From public service to professionalism

Students of mass communications are volumes seem to be appearing at roughly volumes seem to be appearing at roughly weekly intervals, and the dust jackets of most claim they are "major contributions" to the subject. The claims, one hardly need say, are usually exaggerated. Professor Burns's publishers, too, describe his long-awaited book* on the internal life of the BBC in this way; but they do not, all in all, claim too much.

The *history* of Tom Burns's original *foray into* that largest of all broadcasting organisms is by now quite well known. During 15 weeks in 1963 he interviewed about two hundred members of staff. Many people helped to make a difficult task possible, but no one more than Oliver Whitley who was at the time Controller, Staff Training and Appointments. During his long period with the corporation Oliver Whitley gradually emerged as a Conradian figure, a benchmark, a deceptively quiet-spoken man whom many of us, outside as well as inside the corporation, learned to respect and like; he steered straight.

By the time Burns's first report was ready, Oliver Whitley had left staff training; the people with whom Burns then had to deal "quickly made clear to me that their sole interest in the report was in preventing its publication". In those days that was an all-too-typical reaction. *Of course*, the report—several parts of *which were* subsequently published elsewhere—revealed weaknesses. But to publish it would have done the BBC no harm. *Quite the* reverse; the corporation would have acquired credit for its willingness to let outsiders see the state of its internal workings. Publication would also have added a rare phenomenon—gaiety—to the debate. The details of, for instance, the way Oxbridge students used to prepare themselves for BBC interviewing boards (seem clever but not a swot, lively but not frivolous) are plain funny.

Still, times have changed and in this case for the better. When Burns wrote to Charles Curran, the Director General, in 1972 asking if he could now use the material, he was not only given permission but invited to call again and look at the situation 10 years on. Tom Burns is, rightly, warm in his praise of Charles Curran's fair-mindedness in this. So, in 1973, he spent a further six weeks interviewing about sixty people.

It is, of course, in some ways a pity that the 1963 material has had to wait so long to see the light of day; it might have been more practically useful if published earlier. On the other hand, we now have in one volume both an account and an analysis of changes within the BBC over a 'lifespan' of 10 years; and this gives a special dimension to the work.

The basic methodological framework is that of the sociology of institutions. The method is that of tape-recorded conversations, often printed at length, analysed and set into that discipline's context. This particular institution is an unusually difficult one to study and belongs to a definable sub-section of the field: that devoted to organizations which are not only large-scale manufacturers but are staffed by people who see their jobs as something beyond "mere" production. Burns, then, approaches the BBC as "a working community and an occupational milieu".

In trying to encompass the particularity of the BBC he draws on the work of the American sociologist, Everett Hughes. Hughes's concept of "professionalism as a moral order", above all, is an exceptionally fine tool with which to approach the BBC. Its employees have to make some liveable sense out of its quadruple nature: large-scale industry, home of the imaginatively and intellectually gifted, publicly-accountable, and governmentally-licensed authority.

This is all very much to the good. What gives further value to this book is, however, something quite different and uncovenanted. It is that Tom Burns is himself imaginatively excited by this strange profession in which, out of a bewilderingly complex, expensive and difficult set of technical processes there come products of kaleidoscopically-different kinds. This is obviously far more interesting to him as a subject of study than almost any other "industry". His rapt description of Studio 3 at Television Centre, which his publishers rightly quote on the dust-jacket, illustrates this response well. So does, even more, his description of the producer's role within his team:

> Pseudo-charisma. In this context, denotes the finished explication of one or the other recognized models of theatrical demeanour and conduct—"camp" or "butch"—together with effective devices to achieve empathy—jokes, host display, and a curiously common feature, a Cockney, or even a Liverpool accent. All these appurtenances of a producer's appropriate persona are almost consciously donned at the commencement of a planning meeting or a rehearsal; there is an observable moment of bracing. Significantly, there is room for only one such performance in any setting; when a planning meeting for a production was interrupted by the executive producer of the series, liveliness and temperamental quality at once transferred to him, the director assuming a rather flat, businesslike tone.

A man who can write with that kind of perceptive apprehension has something of the imagination of a novelist; and that gives an extra dimension to his work at key moments.

Having said all this in the book's favour, I have two qualifications. That the recorded speech is fascinating is not surprising; BBC staff are professionally articulate and exceptionally self-aware about their jobs; but these records show more than this. They show also that BBC staff are often quite remarkably honest towards their work and themselves. Few professionals, and certainly not academics, could match them. Still, I felt sometimes that, so far as Burns's particular purposes were concerned, the numerous nuggets of quotation did not always sit easily with the movement of his analysis. There is no perfect way to resolve this problem, and certainly Burns is aware of it and tries to solve it. But he has not altogether succeeded; the analysis often moves jerkily, does not build up a cumulative force, because it is constantly being interrupted by those juicy chunks of recorded speech.

The other wish—and one which will have to be registered again and again until matters substantially change—is that the study of mass communications in Great Britain should be more of a joint enterprise; and in particular that social scientists and critics of the arts (literature, film, etc) should get together more. Given his lively imagination, Burns at times almost makes bridges across some of the chasms himself; but not quite.

Here, for example, is one major theme of his book on which such a joint approach might have been immensely rewarding. He argues that in the 10 years between the first and second periods of his study, and as a result of a number of converging pressures, BBC staff had moved from interpreting their role in "public service" terms to doing so in the language of "professionalism". This is a useful and suggestive way of interpreting a secular change in BBC staff attitudes over the decades.

I would want to add, though, that at times a certain fashionable tendency to sniff at the BBC's earnestness towards its own purposes creeps into the analysis here. As a result Burns is less than generous in his interpretation of, for instance, that move in BBC attitudes which led from Reith backing the government of the day, as almost a matter of course, during the General Strike of 1926 and the BBC governors' refusal of Anthony Eden's demands during the Suez affair of 1956. That difference indicates a degree of professional growing-up which I don't find adequately reflected in Burns's neat dissection of "professionalism as a moral order", useful though that concept can be.

What I am saying is that the by now quite subtle tools forged by the sociology of organizations still miss some of the finer music of the language of professionalism in organizations as subtle as the BBC. There are other, less striking, instances of a similar thinness; for example, the argument about "vulgarisation and trivialization" is not presented adequately. Those of us who use it may well be wrong, but not quite in that way.

These two qualifications apart, there is much very good material here. From a great many possible examples, I will mention only a few: the analyses of the increasing role of "management" in BBC affairs and of the intermediary, "professional arbiter" role of the engineers in television; the discussion of the news-versus-current-affairs debate (which, incidentally, confirmed my feeling that the separation of the two harms both).

On received assumptions about what constitutes "news", Tom Burns is particularly well worth quoting:

> But, time and again over the past fifty years, they seem to have been the sheep as often as they have been the shepherd, to have acted in anxious defence of the constraints whose removal they later celebrated, and consistently to have paid much more regard to a consensually predetermined view of what constituted news (translated as "journalistic instinct" or "flair") than from any articulate set of principles or code of practice.

The pages on balance and consensus, on the implied centripetal power of the BBC, on its assumption of a normative role in relation to the culture and its ethic, are tough; but the toughness is justified. There is a blandness about many of the public claims made in this area by the broadcasters which needs cutting through. Burns is right to make statements of this kind:

> Authoritativeness became the overriding quality sought for news broadcast in television, too, after the television service was restarted. And the established practice of a news announcer reading the news "over" a still photograph of Big Ben was designed to sustain that special quality; the equation of impersonality and formality with impartial authority is easy for a British audience to make.

Elsewhere, he describes the freedom of the BBC as "liberty on parole"—from the governments of the day, that is, since governments control the licence fee. Some of these passages seem to me rather grudging of the BBC's successes in its struggle to retain a real area of freedom, in spite of the political pressures which are indeed always incipient. But he is in general right to say that "the politics of broadcasting are the politics of accommodation". If one doubted that, one had only to hear a former senior television official say on the radio recently that the times are not right for hard-hitting broadcast journalism since there may well be a change in government within a few months and the licence fee is at present fixed for only a year ahead.

This valuable book comes at the right time for media studies since, like Erving Goffman in the USA but few others, Burns brings to his professional studies a high level of risk-taking imagination. Studies such as theirs indicate to critics in the humanities, yet again, how valuable collaboration with the social sciences could be and how important it is to start by focusing on those points of crisis in a culture which simply cannot be properly interpreted except by an inter-disciplinary approach.

Richard Hoggart



A still from the first television play in the world which featured Gladys Young in The Man with a Flower in his Mouth, by Pirandello, in 1930. The boy holding the disc, George Inns, later became an executive producer with the BBC.

**The BBC: Public Institution and Private World, by Tom Burns, published by Macmillan at £8.95, ISBN 0 333 19720 8.*

Later this autumn The THES *will be publishing a series of articles on broadcasting and higher education. The first of these articles will appear in our issue of October 21.*

DIRECTOR

NURSING PRACTICE RESEARCH UNIT

NORTHWICK PARK HOSPITAL & CLINICAL RESEARCH CENTRE
HARROW, MIDDLESEX

Applications are invited for the new post of Director for the Nursing Practice Research Unit at Northwick Park Hospital. It is envisaged that the Unit, which is being established by the Department of Health and Social Security, will become a national centre for the study of clinical nursing practice.

It is anticipated that the Nursing Practice Research Unit will collaborate with the MRC/DHSS Epidemiology and Medical Care Unit, to which the Director may be offered an honorary appointment. An honorary contract with the MRC Clinical Research Centre may also be offered to a Director with appropriate interests.

The Director should be a registered nurse, with a good academic background. Considerable research experience in nursing would be expected plus the ability to lead a team undertaking a continuing programme of work. In exceptional circumstances well qualified candidates who do not hold a nursing qualification may be eligible.

The appointment will be for a term of 6 years with the possibility of renewal for a further term. Salary will be within the range £8,850-£8,092 (inclusive of pay supplements) per annum plus £354 London Allowance.

Further particulars and application forms can be obtained from the Principal Nursing Officer (Research) at the Department of Health and Social Security, Room A317, Alexander Fleming House, Elephant and Castle, London SE1 6BY. Closing date for applications is 26th October, 1977.

NOTICE BOARD

Chairs

Dr Angus E. Stuart, reader in pathology at Edinburgh University, has been appointed to the chair of pathology and headship of the department at the University of Newcastle from January 1 for five years.

Grants

Trent

Heterocyclic group — £50,000 from the SRC (£36,770) and ICI Pharmaceuticals Division for a research project on novel synthetic approaches to fused heterocycles for potential pharmaceutical and agrochemical use, to be directed by Drs J. M. Barker, J. C. E. Coates, U. Eisner and P. R. Huddleston of the physical sciences department.

Appointments

Universities

Manchester

Lecturers: N. J. Bryant (drama); G. P. Burton (history); Deborah A. Cherry (history of art); A. M. Tinker (accountancy); J. M. Currie (accountancy); R. L. Curtis (education); H. K. Chung (general practice); N. P. Keaney (pharmacology); C. M. Bradshaw (clinical psychology, psychiatry); I. W. Tomlinson (rheumatology); C. J. F. Watt (chemistry); K. M. Lewis (engineering); R. J. Bauckham (history of Christian thought).

Newcastle

Senior lecturers: M. A. P. S. Downham (child health); D. P. Forster (community medicine). Lecturers: J. P. Owen (radiology); R. A. Seymour (operative dental surgery); Joan C. Beal (English language); D. G. Lonsdale (building technology, school of architecture); J. Lingard (agricultural economics). Deputy registrar: W. R. Andrew. Assistant librarian: Kathleen Bramley.

Oxford

Senior lecturership 1978-79: Professor Paul Ricoeur.

Polytechnics

Hatfield

Deans: E. L. Houghton (school of engineering); W. Bordman, Governing Body; Judge Erick Stockdale, Joseph David, Colin Measures, Tom Badstevens, M. S. Melmore, and O. Murston.

Colleges

Coombe Lodge

Deputy Director: Derek W. Birch. Registrar and clerk to the governors: John H. Roberts.

Mr J. L. M. Trim, director of the department of linguistics at Cambridge University, has been appointed director of the Centre for Information on Language Teaching and Research

Forthcoming events

"Teaching—What is It?", a one-day symposium of the education section of the National Association of Teachers in Further and Higher Education, will be held on November 11 at the Royal Society of Arts, John Adam Street, Adelphi, London WC2N 6HZ. Invitations from Peter R. W. Gallage, Bishop Otter College, College Lane, Chichester, West Sussex PO19 4PE. Closing date, October 10.

* * *

Oxford University's department for external studies is arranging a week-end conference on "Recent Work on Bronze Age settlement in the Thames Valley" to be held at Rewley House, 3-7 Wellington Square, Oxford, October 8-9. Some of the speakers include John Barrett, Colin Burgess and Richard Bradle. Full details from the Course Secretary, Oxford University Department for External Studies, Rewley House, 3 Wellington Square, Oxford OX1 2JA.

* * *

The Association of Certified Accountants is organising a series of lectures in October. Some are: Management Consultancy, An appraisal; Records, Disclosure of information to employees; Management under inflationary conditions; Personal Taxation. For further information please contact Hilary Hall, telephone 580 7179.

* * *

The Institution of Engineering Designers, in association with the National Association for Design Education, is arranging a series of conferences on higher engineering education on October 12 and 13. Applications, which should be made on the institution's own application form, should be sent to the institution at its offices in Princes Consort Road, Farnborough, Hants GU14 6EU, phone 0252 515511.

Noticeboard is compiled by Patricia Santinelli and Mila Goldie

Open University programmes October 8 to October 14

Saturday October 8

BBC 2

5.00* Drama: St Joan (A207; prog 17).
5.25 Environmental control and public health. Asbestos—A Problem Product (T252; prog 10).
5.50 Physics in pure mathematics: Pure Maths (M202; prog 5).
6.20 Physics in pure mathematics: Pure Maths (M202; prog 5).
6.45* Introduction of embedding machine (Understanding Algebra (T241; prog 10).
10.10 Business management. Scott Bader Ltd.—A Case of Common Ownership (B301; prog 23).
10.33 Computer analysis: Complex analysis (M352; prog 11).
11.00 The Nature of Chemistry. Part 2: Organic Chemistry (S207; prog 5).
11.26 Images as information: Imaging the Sun—A Case Study (T251; prog 10).
11.50 Biochemistry: The Uses of Biochemistry (S261; prog 9).
12.15* Pure hand-signed letters in the Communist: The Swedish Parks (1985); prog 11.
13.05 Upper mathematics: An Existence and Uniqueness Theorem (M301; prog 30).

RADIO 3 (VHF)

6.05 Fundamentals of human locomotion: This to be announced (D201; prog 11).

5.25 Open University Announcements/Music (10).
5.45 Mathematics foundation course: Revision (M100; prog 32).
7.10 Maths foundation course: Personal Relationships 18 : "The Rainbow" (A102; prog 30).
7.35 Science foundation course: The Biology of Living Matter—Limiting Reduction (S100; prog 35).

RADIO 4 (VHF)

5.55 Play Time—70.
6.25* History of architecture and design 1900-1975: International Style 1 by Charles Jencks (A305; prog 15).
6.40* The age of revolutions: Romanticism in music (A206; prog 30).
10.00* Personality and learning: Thickers and Thinkers (D302; prog 10).
10.30* Twentieth century poetry: Modernism and Tradition (A356; prog 16).
10.40* Modern art from 1848 to the present: styles and social implications. The impact of American pop culture in the 1960s (A261; prog 31).
11.00* Decision making in Britain: The Myth of Consensus (D301; prog 23).
11.20* Science and the rise of technology since 1900: Energy and History (A282/3; prog 11).
11.40* Social Psychology: Assault on Humility (D305; prog 10).
14.00* Renaissance and Reformation: The Sources of "King Lear" (A201; prog 30).
14.20* Urban education: The Alternative Use of Resources (A261; prog 13).
14.40 The sociological perspective: Sectarian Beliefs (T236; prog 15).
15.00* War and society: The implications of a Permanent Arms Economy (A361; prog 18).
15.20* Cloth from designs and development: Rediffusion and Modernisation (E203; prog 21).
15.40 Open University Music Hall.
16.00 Technology for Teachers. The Work of the National Centre for School Technology (TA137; prog 30).
16.20* Patterns of inequality: "Britain or Revolution" (D302; prog 30).
16.40 Language and learning: Philosophers Talking (L205; prog 10).

RADIO 3 (VHF)

Replacement programmes for North Scotland and Wales

24.00 Twentieth century poetry: Modernism and Tradition (A356; prog 16).
00.20* Modern art from 1848 to the present: styles and social implications. The impact of American pop culture in the 1960s (A261; prog 31).
00.40* Science and the rise of technology since 1900: Energy and History (A282/3; prog 11).

Sunday October 9

BBC 2

7.40 Arts foundation course: Industrialisation and Culture (A100; prog 30).
8.05 Science foundation course: Science and Society 1 (T100; prog 35).
8.30* Mathematics foundation course: Graphs (M101; prog 31).
8.55 Electronics and its applications: Electronic Engineering and its Applications (T232; prog 12).
9.20 Historical bases of behaviour: Human Behaviour (SD120E; prog 15).
9.45 Geographics: Questions (S3-4; prog 6).
10.10* The age of revolutions: The Slave Trade (A206; prog 10).
10.35* Personality and learning: Classroom Interaction (D304; prog 10).
11.00 Music appreciation and society: Edition and Composing (D1-5; prog 14).
11.26 Elements of music: Instrumentation (The prog 8).
11.50 Reading and society: Education in Portugal (T251; prog 11).
12.15* Fundamentals of human geography: Do Plans Matter? (T252; prog 10).
12.40 Curriculum design and development: The School Broadcasting Council (E304; prog 14).
13.05* Modelling by mathematics: "Force Ball Water" (T250; prog 11).
13.30* Science and belief: From Copernicus to Darwin: New and Mountains (AM3/T236; prog 11).

RADIO 3 (VHF)

7.30 Elements of music: Orchestration (A211; prog 10).
7.40 Developing foundation course: Approach to Maths (T100; prog 34).

RADIO 4 (VHF)

9.10 National income and economic policy: Answers to Students' Enquiries (E262; prog 17).
9.30 Life early Roman empire and the rise of Christianity: Trend and Continuity in the Second Century (A201; prog 16).
9.50 Environment: Education and Another Pressure on the Environment (E363; prog 5).
10.10 The digital computer: The Spectrum Data Paper (TM322; prog 26).

RADIO 3 (VHF)

24.00* The age of revolutions: Romanticism in Music (A206; prog 30).
00.30* Renaissance and Reformation: The Sources of "King Lear" (A201; prog 30).
00.40* History of architecture and design 1900-1975: The International Style (A305; prog 15).
Fifty Years After (A305; prog 15).

Monday October 10

BBC 1

6.40 Solids, liquids and gases: Solids, Liquids and Gases (ST106; prog 10).

BBC 2

6.40* Systems management: Scott Bader Ltd.—A Case of Common Ownership (B301; prog 23).
7.05* Economy: "Tobacco More" (B325; prog 10).
7.30 Experimentation: Information in Design Development (T201; prog 11).
7.20* Psychology: The Use of Models (D304; prog 6).
17.45 Chemistry: Nature or Nurture (S200; prog 10).
18.10 Mathematics foundation course: Starting with Numbers (M100; prog 34).

RADIO 3 (VHF)

17.45 Language and learning: Philosophers Talking (L205; prog 10).
18.00 Historical data and the Social Sciences: The Findings (A351; prog 10).
18.25* Systems management: Self-Government: Public Administration (Today; prog 4).
18.45 Public Administration (D331; prog 12).
19.05* Mathematics foundation course: Revision (M100; prog 34).

Replacement programmes for North Scotland and Wales

24.00* Decision making in Britain: The Myth of Consensus (D301; prog 23).
00.20* Urban education: The Alternative Use of Resources (A261; prog 13).
00.40* War and society: The Economy (A361; prog 18).

Tuesday October 11

BBC 1

6.40 An introduction to materials: Properties of Materials (T8251; prog 10).
7.05* Biography: Questions (S2-4; prog 6).
7.30* Numerical computation: Simulation Models (M351; prog 10).

BBC 2

6.40* Biological bases of behaviour: Human Behaviour (SD120E; prog 17).
7.05 An introduction to psychology: Just Learning (D282; prog 10).
7.30 Urban education: A Sense of Belonging (A261; prog 13).
17.20* Computer analysis: Complex analysis (M352; prog 11).
17.45* Instrumentation: Instrumentation in Plant Development (T251; prog 10).
18.10 Systems performance: Human factors and engineering failures: Roll or Road (T101/2; prog 10).
18.35 Science foundation course: Science and Society 2 (S100; prog 36).

RADIO 3 (VHF)

6.00 An introduction to psychology: Applying Research to the Real World (D282; prog 12).
6.20 Science and belief: From Copernicus to Darwin: A Retrospect (AM3/T236; prog 11).
6.40 Personality and learning: The Uses of Observations (D304; prog 5).
17.45 Mathematical foundation course: Mathematical Topics (M101; prog 32).
18.05 Open University—Music Hall.
18.40* Human geography: Questions (S3-4; prog 6).
19.08* Arts foundation course: Industrialisation and Culture (A100; prog 30).

Replacement programmes for North Scotland and Wales

24.00* Social psychology: Assault on Humility (D305; prog 10).
00.20 Art Announcements: Music Hall.
00.40* Curriculum design and development: The School Broadcasting Council and Modernisation (E304; prog 14).

Wednesday October 12

BBC 1

6.40 Systems behaviour: Shipbuilding 2 (T241; prog 10).
7.05 History in mathematics: An Evolutionary Approach (A261; prog 10).
7.30 People and work: Unions and Management (D301; prog 11).

BBC 2

6.40* Genetics: Nature or Nurture (S200; prog 10).
7.05* Speaking and Society: Education in Portugal (T251; prog 11).
7.30 Arts foundation course: Industrialisation and Culture (A100; prog 30).
17.20 The use of revolutions: Romanticism in Music (A206; prog 30).
17.45* Management in education: Reviewing the Course (E362; prog 12).
18.10* The age of revolutions: Class and Birth (A206; prog 10).
18.35 Arts foundation course: Industrialisation and Culture (A100; prog 30).

RADIO 3 (VHF)

6.00 Management in education: Reviewing the Course (E362; prog 12).
6.20 Urban education: Resources for Learning (A261; prog 13).
6.40 People and work: Unions and Management (D301; prog 11).
17.45 Environmental control and public health: Food Preservation (T252; prog 10).
18.05* Social Sciences: The Use of Libraries (A351; prog 10).
18.25* Computing and computers: The Computer and Society (TM207; prog 10).
18.45* Biochemistry and molecular biology: Molecular Biology (S262; prog 10).
19.08 Mathematics foundation course: Number Systems (M100; prog 14).

Replacement programmes for North Scotland and Wales

24.00* Technology for teachers: The Work of the National Centre for School Technology (TA137; prog 30).
00.20* Patterns of inequality: "Britain or Revolution" (D302; prog 30).
00.40* Language and learning: Philosophers Talking (L205; prog 10).

Thursday October 13

BBC 1

6.40 Modern art from 1848 to the present: Styles and Social Implications 1 (A261; prog 31).
7.05* Mass communication and society: Editing and Composing (DE301; prog 16).
7.30* Elements of music: Instrumentation (A241; prog 8).

BBC 2

6.40 Education, economy and politics: The Case of William Tyndale Part 1 (E362; prog 10).
7.05 Structure and molecular biology: The Major Incompatibility Complex (S262; prog 10).
7.30 Fundamentals of statistical inference: Hypothesis Testing (M341; prog 10).
17.20* Systems behaviour: Shipbuilding 2 (T241; prog 10).
17.45* The development of Europe: Europe since 1945: The Cold War (A365; prog 16).

RADIO 3 (VHF)

6.00 Social government: Magazine for Readers (D201; prog 11).
6.20 Urban development: Future City (D201; prog 12).
6.40 The Hanseatic League: Community: Leading Not Ruling (A261; prog 14).
18.05 Mechanics and materials: Information Theory (T241; prog 10).
18.25 Genetics: Nature or Nurture (S200; prog 10).
18.45 The Industrial Revolution: The Role of Steam (A261; prog 10).
19.05 Overall Assessment (TM207; prog 6).
19.10 Technology: Introduction to Approach to Design (T101; prog 10).

Replacement programmes for North Scotland and Wales

00.20* Personality and learning: Thickers and Thinkers (D302; prog 10).
00.40* Open Forum—35.

Friday October 14

BBC 1

6.40 War and society: Conclusions (A361; prog 18).
7.05 Renaissance and Reformation: The Sources of "King Lear" (A201; prog 30).
7.30* Science and belief: From Copernicus to Darwin: Darwin and Evolution (AM3/T236; prog 11).
17.45 Mathematical foundation course: Mathematical Topics (M101; prog 32).
18.10 Open University—Music Hall.
18.35 Science foundation course: Science and Society 2 (S100; prog 36).

RADIO 3 (VHF)

6.00* Environmental control and public health: Food Preservation (T252; prog 10).
6.20 Mathematics and mathematicians: Pioneers and Innovators (M101; prog 33).
6.40 Elements of music: Orchestration (A211; prog 10).
16.05 Drama: "Sir Jack" (D201; prog 10).
17.20 Speaking, Listening and Society: Linguists and Lore (A351; prog 10).
17.45 Science and the rise of technology since 1900: Energy and History (A282/3; prog 11).
18.10 Mathematics foundation course: Revision (M100; prog 34).
18.35 Open University—Music Hall.

RADIO 3 (VHF)

6.00* Environmental control and public health: Food Preservation (T252; prog 10).
6.20 Mathematics and mathematicians: Pioneers and Innovators (M101; prog 33).
6.40 Elements of music: Orchestration (A211; prog 10).
16.05 Drama: "Sir Jack" (D201; prog 10).
17.20 Speaking, Listening and Society: Linguists and Lore (A351; prog 10).
17.45 Science and the rise of technology since 1900: Energy and History (A282/3; prog 11).
18.10 Mathematics foundation course: Revision (M100; prog 34).
18.35 Open University—Music Hall.

Replacement programmes for North Scotland and Wales

24.00* Social psychology: Assault on Humility (D305; prog 10).
00.20 Art Announcements: Music Hall.
00.40* Curriculum design and development: The School Broadcasting Council and Modernisation (E304; prog 14).

Replacement programmes for North Scotland and Wales

24.00* Renaissance and Reformation: The Sources of "King Lear" (A201; prog 30).
00.20 History of architecture and design 1900-1975: The International Style (A305; prog 15).
00.40 Fifty Years After (A305; prog 15).

* repeated programme.

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Application forms and further details can be obtained from the Director of the Nuffield Foundation, Nuffield Lodge, Regent's Park, London NW1 4RS.

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ASSOCIATION OF POLYTECHNIC TEACHERS

Staff Development in Polytechnics

Wednesday, October 19, 1977
Polytechnic of Central London, Marylebone Road.

Speakers include: Rev. Dr C. Tilley (Chairman of ACPHE Committee on Staff Development), Dr D. E. Billing (CNAA Science Cttee), and Dr D. E. Davies (Civil Service Task Force on Information).

Full particulars from APT Head Office, Throgmorton House, 27 Elphinstone Road, Southsea, Hampshire PO5 3HF.

Early booking advised.

REMINDER

Copy for Classified Advertisements in the THES should arrive not later than 10.30 am Monday preceding the date of publication

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Fact and value must not be confused

Sir Andrew Huxley replies to Robert Young's criticisms of his presidential address to the BA

In response to my presidential address to the British Association, Robert Young fills a page of the THES of September 23 with an attack on what he supposes to be my attitude on various aspects of race relations between science and society. There are evidently some basic points of disagreement between Dr Young and me, and on these I am glad of this opportunity to put my views more clearly than was possible in a one-hour speech. I would indeed have felt that I had failed to get my main point across if I had not drawn the fire of someone with Dr Young's views.

The headline over his article, "Can we really distinguish fact from value in science?" is closely similar to what I said at Aston. But Dr Young does not address himself to this question. He says "The issue is not the boundary between facts and values", and devotes most of his article to using things that I said as pegs on which to hang a denouncement of the familiar radical point of view about science.

I do not share this point of view, but I am not going to be drawn into a repetition of things that can be held against it. There would be no chance of convincing Dr Young, and readers of the *TIMES* must have heard them rehearsed many times before. It would be too like the altercation between Mrs Bennet and one of the young Lucases in *Pride and Prejudice* when the same assertions and denials were made repeatedly and "the argument ended only with the visit".

A substantial part of his article is, however, directed against a point of view which I have never held, which I did not express at Aston, and which he has no grounds for attributing to me. He attacks me as if I had claimed that not only scientific and industrial research, but even all applications of science, should in all respects proceed without regard to human and social considerations.

I said nothing to suggest that the amount of effort devoted to different problems should be independent of social needs, or that applications of science should not be subject to social constraints. I do not believe Dr Young has any excuse for reading such ideas into my words. *The Times*, for example, in their reports and their leading article on September 1, and the *New Scientist* (September 1), took my words exactly as I meant them.

Social considerations

I do in fact regard it as perfectly right that social, human and economic considerations should influence decisions both on the distribution of research effort and on the application of science, though very likely Dr Young and I would disagree about how strong an influence is desirable in any particular case. I said nothing on those important matters simply because they are not the topic I chose for my lecture.

I am honoured to have my name coupled by Dr Young with those of Basilio, Hume, Mill and Popper, but he is mistaken in classing me as "the defenders of the existing arrangements against the so-called Green Paper 'customer-contractor' proposals"; I did in fact criticise a good deal of unthinking among colleagues in defending most of the proposals when they were discussed by the Physiological Society.

Nothing I said at Aston about the connection between science and industry was on a limited but important theme, and I see no reason to withdraw from my conclusion that in the long run the success of science depends entirely on conclusions being independent of wishes and fears about their practical application". All the evidence that I gave were relevant to this point.

Dr Young does not come into the open and say whether he does or does not think it right that the conclusions reached in a scientific investigation ought as far as possible to be "independent of wishes and fears about their practical application".

If he does, he is in agreement with the main thesis, and his attack on me are irrelevant.

If he does not (and this is suggested by the very fact that he has felt impelled to attack me), we should like to know why he does not say so. I suggest that it is because he knows that when the issue is put down in black and white he will not convince anyone who is not already of his own way of thinking. Instead, he tries to discredit me by attributing to me opinions which I do not hold, and which he can demolish by means of rhetorical questions.

The point of substance on which Dr Young and I are presumably in fundamental disagreement is the long-standing question: where, if at all, should a line be drawn between "fact" which is to be exempt from social and political pressures, and "value", where such pressures are legitimate?

Of course it is impossible to draw a hard and fast line which will be agreed by everybody, just as one cannot specify a single wavelength which divides "green" from "yellow". I went out of my way to indicate whereabouts I draw the line, by deliberately choosing examples which I regard as near the line. The cases of Burt and of Shockley, for example, each have features which fall some on one side and some on the other of my line.

Dr Young, however, is again not explicit. If he admits the existence of a line, it is clear that he draws it so as to exempt very much less of scientific activity from political pressures than I do, but the general tenor of his article—for example, his reference to a "range" on which "there are no fences"—suggests that he recognizes no line, and to him there is no part of scientific activity which can claim independence in any respect from political influence.

A test case is the Lysenko affair, on which I spoke but Dr Young is silent. Is he with Haldane in rejecting Lysenko's position, or with Bernal in accepting it? His article gives the impression that in 1948-49 he would have sided with Bernal, Lysenko, and the 1948 session of the Lenin All-Union Academy of Agricultural Sciences, in justifying



Sir Cyril Burt: concerned with social mobility, not repression.

the suppression of Mendelian genetics in the USSR and the removal of every supporter of it from his post.

Bernal's arguments defending Lysenko are the same as those which Dr Young vents upon me. For example, here is Bernal's description of the Michurinists on whose claims Lysenko's theories were largely based:

"These men are the scientists of the new socialist world, and we must expect them to appear startling and even repellent to many scientists brought up in the sentimentally traditions of scholastic research. They are active and purposeful. They are politically educated. The old empiric neutrality and impartiality of science is not for them. They recognize it as concealing implicitly approval of and assistance to the exploitation of capitalist economy". (*Modern Quarterly*, NS4, p. 211, 1949).

For reasons of space, and of my own time, I take up only a few of the specific points in Dr Young's article. On Sir Cyril Burt he says, "The values, theory and policy came first, and the findings were created, embroidered and filled up to suit them." If this is true, then the case is a flagrant example of what I was speaking against, and I regard such action as absolutely unpardonable. I do not myself believe that it is true.

There is no point, however, in arguing the matter any further in public, since judgments depend on very indirect and uncertain inferences from the discrepancies in his publications. More clues and evidence are still turning up: *The Times* of September 20 reports the discovery of names corresponding to three of his "missing" collaborators in the membership lists of the British Psychological Society.

The matter to which I referred in my address, however, was the insinuation of "racism" that was made against him during the correspondence, and which, as far as I can judge from conversations with colleagues here who know him, is absolutely without foundation. If he looked forward to social consequences of his work, it was not in the repression of minorities with a poor showing on his tests, but in the prospect of upward social mobility of individuals who did well.

IQ and performance

On Shockley. In the United States, two major aspects of the colour problem are the high unemployment rate among Negroes, and the small proportion of Negroes receiving higher education and entering the well-respected occupations associated with it. These are almost certainly connected with low performance in school and on IQ tests. Most people would, I think, agree with me that the chance of ameliorating these matters of Negro employment would be raised by improved understanding of the causes of the differences in school performance and IQ tests.

It is easy enough to suggest causes for the differences, from racial prejudice, through deprivation and social inheritance, to genetic factors, but at present, as far as I can judge from the viewpoint of an outsider, almost nothing is known reliably about the relative contributions of these and perhaps other factors. Massive investigations, and massive and expensive experiments such as the Headstart programme, have been carried out over the last 20 years or more, but have been blazed by a reluctance to contemplate the possibility that genetic factors might be significant.

This reluctance is largely due to the widespread but unthinking—and unfounded—assumption that a "hereditarian" view, that is a belief in the existence of a substantial genetic component, implies also a "racist" view—a wish or an intention to subjugate or repress a minority which is genetically handicapped.

This equating of "hereditarian" with "racist" is, I imagine, largely due to associations between the words formed during the Nazi régime, but I believe it has been perpetuated by radical propaganda whose tradition goes back direct to the French Revolution and Rousseau. It is the basis of the attacks, both verbal and physical, that have been made on Jensen and Eysenck.

Shockley's call for investigation of the genetic component has several aspects. The first, of which I approve, and which, of all bodies, universities ought to have supported, is that it was a call to eliminate this political bias from the investigation of something that I put on the "fact", not the "value" side of my line, that is, the origins of differences in ability.

A second aspect is that it was a call for an increased effort in these investigations. As I have already said, I regard the *scale* of investigation in any field as legitimately subject to human, social and economic considerations, but we must remember that an enormous effort was already going into these investigations.

I would regard it as a defensible, but mistaken, position to say that *all* investigations of differences of ability should be cut down; what I regard as absolutely wrong is that investigations which appear likely to lead to one kind of answer should be excluded while others are permitted. As to the positive advantages that might come from understanding the genetic component (if it exists), I have expressed some opinions in *Nature* of 29 September.

A third aspect of Shockley's position is his eugenic proposals. These I regard as squarely within the social and political arena; the most that science could ever do in this context is to predict the effects of a proposed policy (or lack of policy). Like most people, I find his proposals objectionable, and I do not think that an unobjectionable scheme for large-scale eugenic measures could be produced now or in the foreseeable future.

On the other hand, differential birth rates, if correlated with genetic differences, could cause rates of evolution far in excess of anything produced by ordinary natural selection, and their effects should be watched. (I am not thinking mainly of IQ or matters of that sort. For example: family size is now determined almost entirely by parental choice; if the desire to have children is to some part genetically determined, we are selecting against the will to limit family size, and in a few generations' time we shall be overtaken by another wave of rising birth rate).

But human genetics is still in so undeveloped a state, and reproductive habits change so fast and so unpredictably, that it would be premature and inappropriate to contemplate manipulation of birth-rate differentials at the present time.

Dr Young quotes two passages from an essay by my grandfather T. H. Huxley, written soon after the end of the American Civil War and in which, as Dr Young says, he "welcomed the freeing of the American slaves and favoured female education". One of the same passages, expressing the opinion that American Negroes would not be able to compete successfully with whites, was also quoted in a leaflet issued by the Aston branch of the British Society for Social Responsibility in Science and circulated at the end of the British Association meeting. The leaflet imputed that the passage in question implied "racism" on my grandfather's part; it was quoted in the *New Scientist*, and I have written a reply, which appeared in the *New Scientist* of September 29, which rejects that imputation.

Dr Young does not make it clear what deduction he expects his readers to draw from those passages, but in case anyone thinks the first one "racist", he should read my reply in *New Scientist*. The quotations I make there are equally relevant to the passage about women quoted by Dr Young.

I repeat: Dr Young says "The issue is not the boundary between facts and values". Of course this is not the only issue, but it is a vital issue and it is the issue on occasion in the bar of the Biltmore Hotel in Manhattan, grew a joint (or perhaps several) relationship with the Central Bureau, and more extended meetings culminated in a decision to seek a formal existence.

On September 23 last year the private sector went public, deciding to establish, under the aegis of the Central Bureau, what is now known (against the author's better judgment), as the Universities' Transatlantic Exchanges Committee, consisting initially of a steering committee meeting quarterly and open to any university personnel active in the field. In practice a hard core of seven sustained UTEC through its early stages.

More recently, UTEC has become a membership organization, with an annual subscription of £25, an inaugural annual meeting in London on October 20, and Roger Simpson at the Central Bureau as secretary with Jeremy Atterton at UCL as chairman. Some 15 universities have become members so far, in order to exchange information, provide mutual assistance in the development of new programmes and, as an initial and urgent task— efforts towards which have already borne fruit—to make some sense of transatlantic travel arrangements. New exchanges, too, have already resulted, with surprise at how little such arrangements need cost.

To universities involved in North American programmes UTEC thinks it can offer help and give access to informational and operational resources currently difficult to find; and those who are not may well be missing something from which some at least of their students could derive great benefit.

Edwin H. Cox

The author is overseas relations officer at Sussex University.



Links with US universities are being actively developed by the newly created Universities' Transatlantic Exchanges Committee.

Helping to bridge the great divide

For many years, numerous British universities have been exchanging students with their counterparts in the United States; such programmes, like dance-tunes, include the old, the new, the loved, the neglected. What is apparent, however, is that during the past decade, and more particularly in the last three or four years, developments in this field have become more rapid, extensive and imaginative.

Consciousness of the opportunities which have come to exist has been most obviously promoted by the Central Bureau for Educational Visits and Exchanges; recently the advantages of co-operation between institutions of higher education have been seen more clearly. And if universities have been more reticent than the colleges and polytechnics in deciding that the sharing of intelligence and expertise might yield significant advantages and open up new possibilities, that too has changed, ever since about two years ago a small group of us, quite informally decided to intrude on the privacy of the private sector.

From informal meetings between Kent, Sussex and University College, London, in various combinations—as often as not in the London office of the University of California—and on one remarkable later occasion in the bar of the Biltmore Hotel in Manhattan, grew a joint (or perhaps several) relationship with the Central Bureau, and more extended meetings culminated in a decision to seek a formal existence.

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BOOKS

Alternative sociologies

The Form of Sociology: Paradigms and Crises
by S. M. Eisenstadt with M. Curelaru Wiley, £12.50
ISBN 0 471 23472 9

Sociology in the Balance: A Critical Essay
by Johan Goudsblom
Blackwell, £7.00 and £3.25
ISBN 0 631 17320 X and 17330 7

Ever since Thomas Kuhn published his *Structure of Scientific Revolutions* sociologists have debated whether or not there is such a thing as "normal science" in sociology, or whether, by its very nature, the subject must be in a state of permanent revolution. On the other hand, since science and social science is itself a social activity, sociologists, embarrassed by their lack of an agreed paradigm, could always fall back on the sociology of science, the sociology of sociology and reflexive sociology as their main concern. In a way in which natural sciences in revolution could not. Hence the importance which has attached to such books as Gouldner's *The Coming Crisis in Western Sociology* or Friedrichs's *A Sociology of Sociology*. But since 1968 a further factor has intervened. Political ideologists and students have not merely demanded a revolution in sociology. They have questioned such basic assumptions as its notions of science, of evidence and, indeed, of truth itself.

The two thoughtful books here are both by men more or less from the sociological mainstream responding in a liberal way to the new trends about them, trying to make clear their own paradigm, yet admitting that nowadays the rules of the game permit many alternatives. Eisenstadt, who has been an important teacher and developer of Parsonian theory acknowledges the passing of Parsons's pre-eminence and looks as generously as he can on the developments which he sees flourishing in its wake. Goudsblom, more firmly anchored in the European tradition and owing a special allegiance to that great and far too underrated teacher at Leicester, Norbert Elias, writes from Amsterdam, of all places, and has to develop a conception of the width of the subject broad enough to keep open the possibility of debate with his students.

Probably the central theme in Eisenstadt's book is the emergence in opposition to what he calls "discrete" approaches of some notion of systems theory. This is already perceptible in the period of the Founding Fathers, but is most clearly represented in the work of Parsons and in the relatively greater influence which his theory had in the fifties and early sixties compared with the individualistic theory of Parsons's Harvard colleague Homans. He himself was much influenced by Parsons, but admits that his apparently closed-systems approach gave way eventually to one which he chooses to label "open-systems", the best exemplar of which is to be found in the work of Weber, who always did have some notion of systematic interconnectedness, but saw this as a matter for empirical investigation. Merton's significance in modern sociology might also have been mentioned here, though Eisenstadt sees him primarily as the advocate of theories of the middle range.

If there was ever a Parsonian paradigm it has now broken up and seems to be challenged by a variety of different types of conflict theory and by symbolic interactionism and ethnomethodology. This, however, only on the level of academic sociology. Much more fundamentally there has been an impingement of external philosophical, political, methodological and ideological controversies into sociology and it is these that represent the greatest challenge for Eisenstadt. It is good to see that in the face of some very strident voices calling for reformation, renewal and abandonment of sociology, Eisenstadt draws between constructive approaches which still distinguish a specifically sociological task and abdications which have in effect abandoned the sociological enterprise altogether.

It is instructive, however, to read from Eisenstadt's book to Goudsblom's, because Goudsblom, while does not appear to have been heavily influenced by the Parsonian tradition, gives one a sense of relief from the awkward prose and what seems to be an essential part of the Parsonian style which has characterized Eisenstadt. Here we have a review of the varieties which have always existed among sociologists, their attitude to fact-finding, to systems-building, to questions of the scope of the subject and to the problems of relevance to urgent political concerns.

Anyone who has felt uneasy in the presence of sociologists who make one feel that there is no method or theoretical approach which will expedite a sense of purpose in finding out how much is knowable and possible nowadays. On the basis of Norbert Elias's approach to sociology as represented by his book *Über den Prozess der Zivilisation*, which is relevant though it is in its own way, Goudsblom does not seem able, to judge from Goudsblom's account of it, to give the weight which he attaches to it as the measure of all other theories. Among other things it leads him to a very crude account of Weber's so-called methodological individualism which contrasts sharply with Eisenstadt's view of Weber as a systems theorist.

It is good to have these books reviewing the range of what sociology passes as sociology. Hopefully such studies will prepare the way for an even more important task, that to set up boundaries between sociology and ideology. Eisenstadt is surely right in suggesting that the alternation is not the only choice possible for sociology.

John Rex

Where the few lead the many

Organizational Behaviour in Its Context: The Aston Programme III
by D. S. Pugh and R. L. Payne
Saxon House, £8.50
ISBN 0 566 00159 4

Critical Issues in Organizations
edited by S. Clegg and D. Dunkerley
Routledge & Kegan Paul, £3.25
ISBN 0 7100 8506 0

The search for organizational theory arose historically from the limitations of the prescriptions offered by management theorists, such as Fayol, Taylor and Urwick. Such prescriptions could be challenged on two grounds. In the first place, general rules or principles of organization governing structure and the definition of authority could fairly easily be shown to be inappropriate, when applied to certain types of organization or organizational situation. The Weberian "model" of bureaucracy soon became modified to a typology of organizations, each one different, in the hands of socialists, such as Gouldner, Blau and Scott and Burns and Stalker. Such typologies led to contingency theory, which threatens the whole idea of a general theory of organizations, except in terms of system theory. Derek Pugh and the Aston Group have tried to tackle this problem consistently and systematically over the years by providing a conceptual framework and measures to allow precise differences between organization structures and other variables to be exactly determined.

The first book reviewed here, *Organizational Behaviour in its Context* is the third volume or articles by the Aston Group summarizing their work, which particularly deals with the relationship of structure to the attitudes prevalent among organizational members (the "climate" of the organization). Although modest in their detailed claims, the various authors share the belief that their approach will provide the basis for the "design of effective organizations" and the design of roles to protect "the physical and mental well-being of the managers in the organization".

The second criticism of organizational prescriptions is simply that they are irrelevant to the major issues posed by the growth of large organizations in modern technologically advanced societies. This is more than the standard argument that efficiency is not the sole criterion by which organizations can be judged or that groups other than management need to be considered in organizational design decisions. It reflects the view that organizations are agencies by which the few are allowed to dominate the many.

Students of organizations therefore should focus on power and its exercise and its effects. *Critical Issues in Organizations* follows this line of argument exactly. The authors are a number of researchers who have met through the recently formed European Group ofw Organizational Studies (EGOS) and the intention of the volume appears to be to try to redefine the area of organizational theory to contain the issues which are seen as more important than the traditional questions as debated by the Aston writers. These new issues include the position of women in organizations, the concept of power, the nature of technological capitalism (the latest form of capitalism), the relation between the state and organizations and the study of the men of defensive and offensive strategies used by organizations.

Although both books contrast sharply in their ideas, the assumptions of their authors, their style of writing and their objectives, nevertheless they both raise indirectly the central question of the validity of organizational theory itself. Precisely what reasons are there for believing that individual and group behaviour can be studied through focusing on organizational roles, so that valid universal generalizations can be made and predictions verified? Certainly it is a sociological commonplace that social relationships are transformed in a society in which the boundaries of individual decision-making are increasingly derived formally through organizational processes. It is also a sociological commonplace that sharp differences can be observed in the nature of power relationships within and between organizations in different societies, both between those with market based economies and between those with socialist ideologies and economic structures adopted and the former be explained by cultural factors even by "late development" arguments. They exist because the decisions taken at certain points in development, the institutional structures adopted and the power nature of the basis of power of ruling coalitions in any society.

The contribution of Derek Pugh and his colleagues, which is represented by the Aston Programme III volume, does not help with his methodological objections (the use of scaling techniques and multi-variable correlation analysis) or with his conceptual framework or even with his very general hypotheses which can be "tested" by the research literature, for example, the effect of role structure on satisfaction). It lies with its insistence on the need for empirical comparisons and the use of exact measurement and quantification to explain differences. The failure of this approach arises not from the method which is often of considerable interest, but from the belief that there is somehow the basis of a general theory of organization theory.

The contribution of Stewart Clegg and David Dunkerley on the other hand is more difficult to ascertain. In spite of the overwhelming evidence supporting their argument that organizational analysis must be embedded in "wider social relations and specific institutional arenas within these", the book itself only serves to confuse and frustrate with quite unnecessarily turgid prose and non-English. The essay of Arthur McCullough and Michael Shannon does raise some interesting issues on the dependence of organizations on the state and Arthur Wassenberg's essay touches on the crucial question of the determination of organizational strategies, but all in all, there is little here to commend a serious reader. Its does not, under any perspective, succeed in redefining organizational theory, but if it does serve to warn others, it will indirectly have provided some service to sociology.

Keith Thomas

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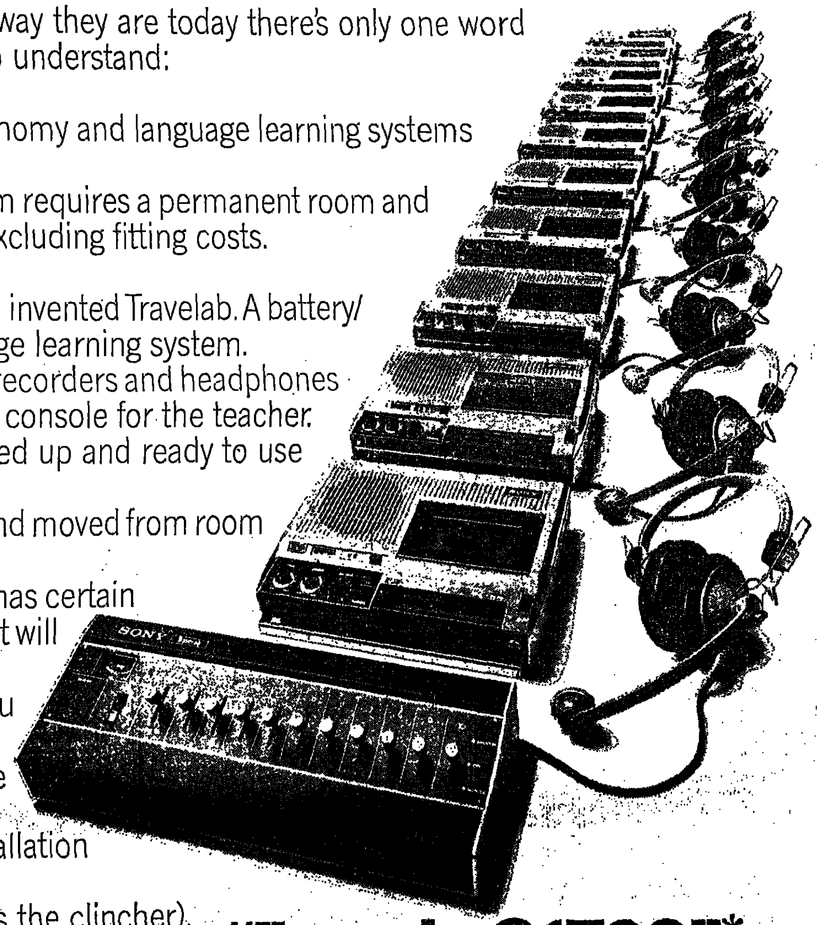
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BOOKS

Debunking

Skeptical Sociology
by Dennis H. Wrong
Heinemann, £6.90
ISBN 0 435 82968 8

In time when we are bombarded by new sociologies, critical sociologies, radical sociologies, and other sorts of -ologies, each claiming to present the new way for sociology and to discredit its predecessors, it is pleasant to read a collection of theoretical essays by someone who is just a sociologist.

A sceptical sociologist, as Wrong aptly describes himself, is committed to intellectual integrity and telling the truth. Such a commitment involves a sceptical attitude to fashionable creeds and ideologies, whether they be dressed up in sociological, scientific or religious clothing.

These 17 essays, written over the last 15 years, are arranged in three sections, each with a useful introduction placing them in context. The first section deals with human nature in sociology, community and identity; the second examines social stratification and inequality; while the third is concerned with power and politics. The breadth of Wrong's intellectual focus, from socio-psychological conceptions of man to international politics, is impressive, especially in the face of increasingly narrow specialization in sociology.

What stands out from the work as a whole is Wrong's perceptive and sensible approach to sociological issues, coupled with his detachment from the various sociological fashions that have waxed and sometimes waned during the period when the essays were written. He is at his best when he is debunking fashions—the "oversocialized conception of man" of the 1950s, "community" and "identity" as catchwords of the 1960s and cliches about the future in the 1970s.

His critical arguments are never polemical, extreme or dogmatic, but are always balanced and carefully reasoned, seeking as much to draw out elements of truth as well as to expose falsity. Perhaps this is why, apart from his "oversocialized conception of man" paper, his work has not attracted wider attention—in sociological circles it is usually the extreme and the polemical that gain the academic limelight. I detect a rueful note about this in this introduction to the different sections.

Wrong does not always quite live up to his own tenets of sceptical sociology. His critical discussion of the functions of social stratification, admirable in many ways, fails to confront the question of how the functional importance of different positions in society can be assessed, thus seeming to accept conventional beliefs. I am not convinced that accountants and solicitors, or for that matter sociologists, are of greater functional importance to society than refuse collectors, sewage workers or agricultural workers.

His conception of democracy is rather limited. This is not altogether equated with Western societies, but none without Western-style political systems is regarded as democratic. His discussion of power becomes involved in rather too many conceptual distinctions, which do not always seem to be related to actual problems of exploiting the exercise of power in the world.

But this is exceptional, and Wrong is certainly not one of those theoretical sociologists who are more concerned to understand their colleagues and predecessors than they are with the real world. Wrong never loses touch with social reality.

There is not much in the book that is very original, but then it does not claim to be such. It is valuable in providing balanced, perceptive and reasoned comments on several important contemporary sociological issues. It is not only very readable, but has a literary quality that is very rare in sociological writing. It is therefore to be warmly recommended not only to students, but as a good example of contemporary sociological thinking, to anyone who wishes to become better acquainted with sociology.

David Berry

Feeling the pinch?

Rule-making and Industrial Peace
by J. F. B. Goodman, E. G. A. Armstrong, J. E. Davis and A. Wagner
Croom-Helm £9.50
ISBN 0 85664 430 7

Industrial relations are always a baffling mixture of "pure" economic forces and sociopolitical practices. Most scholars nowadays, therefore, would accept that no one social science discipline by itself possesses sufficiently powerful theoretical tools to comprehend the whole. Alas, there is little agreement on how to combine different analytical systems.

This new study of the British boot and shoe industry certainly illustrates just how complex particular cases can be. The industry remains highly competitive with many small producers. Economic interest has created a majority of employers willing at any one time to take wages out of competition by rule-making in conjunction with the union. Paradoxically, economic interest also makes unity among employers and workers so precarious that the union and the employers' association have for some time been successfully engaged in tacit mutual support.

The result should at least confound those who ascribe our economic ills solely to strikes and wage claims. Current problems of the shoeman sound familiar—rising costs, foreign import penetration, virtually static demand. Yet the trade was one of the pioneers of arbitration. It has had "industrial peace" since 1914. Wage advances have been moderate. All differences are settled within a framework of rules. Anyone requiring an up-to-date account of this will need to read this book from now on.

Are there, however, any implications for theory and practice where? On such analytical the book proves disappointingly humble role for social the authors adopt a framework which seems confused. They start with Dunlop's now-dated idea of "industrial relations system". An attempt to fit union-management relations within the sociology fashionable at the And like that theory, it begs the question of concept of "system" itself. mizing this, the authors the concept of "rules of action" which stems from altogether different tradition. It will certainly those who are not avid readers of the *British Journal of Industrial Relations* where this approach recently more fully explored.

Worse, the book overemphasizes the formal aspects of Even in the chapter on relations we are given only dening glimpses of how perceive the "peace". To be a footnote promises "more closer involvement on the floor". I hope so. Without account of the system is incomplete.

Might it nevertheless be true, and less mystical to say that workers in our union have much in this industry? Order persists because contentious issues are rarely brought forward. Indeed, union has largely acquiesced in the piecework, redundancies, and Surely nothing would illustrate better that there is a sense in which systematic and peaceful wage solution can be the very opposite successful collective bargaining?

D.L.L.

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BOOKS

In praise of the puritan

Puritan, Paranoid, Remissive: A Sociology of Modern Culture
by John Carroll
Routledge & Kegan Paul, £3.95
ISBN 0 7100 8622 9

"Woe unto you" is the message of John Carroll's *Puritan, Paranoid, Remissive*. It is a polemic written with a Freudian pen dipped in the blood of Calvin. Three "ideal types" of psychological disposition are drawn with perceptive brilliance and then used to herald the decline of western civilization from the erstwhile passions of the puritan to the imminent (and probably immanent) nothingness of remissive hedonism by way of the present-day transition state of paranoia.

The book is in two parts: first the argument and then the footnotes which are comprised of six short essays.

The argument starts with a description of the puritan character which Dr Carroll places at its height in Europe just before the outbreak of the First World War. The puritan believed God had decided either that he was elect or that he was not, and that there was nothing he could do about it. But he also (later) believed that he could illustrate his election (or lack of it) through his conduct. The highest art is the art of living; his vocation is a passion for work in this world, his acts are to be judged not for their contribution to the common weal but by their motives; penance, not penitence, is all that is available to assuage his guilt. Life is lived with a burning intensity.

There are four historic stages. First the Calvinist worked for God, then knowledge and work were for their own sakes—while still harnessed to salvational hopes they had become secularised. Next followed a stage of utilitarian work, work as a means to a purely materialistic end (though Carroll is unsure about the existence of this stage). The final stage, the remissive one, attempts to replace work by play, nothingness of remissive hedonism by way of the present-day transition state of paranoia.

The process, which basically celebrates the decline of individual authority, is one in which education plays a crucial role. The universities which ought to have clung to a passion for knowledge and to the values of reason have irresponsibly jumped on the bandwagon of anything-goes-remissiveness where the laws of hedonism put novelty at a premium, curiosity is never sustained, and fathers turn to their sons for guidance. Education falls into a state of anarchy where only the fittest survive, where magic displaces reason, and where the individual becomes a free-floating entity of impulse rather than a recognizable personality.

Carroll makes no secret of the fact that his preferences lie with a puritan culture. Not only does he have an aesthetic preference in that direction but he believes puritan politics may well be necessary for survival. His book does in fact exhibit some of the properties of a puritan character—perhaps the most interesting of which is the passionate juggling with contradiction, and the most interesting contradiction which he explores in Calvinism and does himself enjoy is that between determinism and responsibility which entails free will. While Carroll does not assert a supernatural determinism he does proclaim a genetic/Freudian one, believing as he does that we have innate dispositions which either clash or (if we are lucky) resonate with the predominant culture.

To what extent one considers that Carroll also displays paranoid tendencies—that is, how far he irrationally exaggerates threats to the private individual from the public culture—will perhaps depend on one's own disposition. At the risk of being accused of exhibiting my fair share of paranoia I am prepared to declare that I believe Carroll has written a timely, possibly fertile, but none the less very good book. Had she been harkened unto, Cassandra might have had her uses.

Eileen Barker

An aesthetic activity

A Poetic for Sociology
by Richard H. Brown
Cambridge University Press, £10.50
ISBN 0521 21121 2

Richard H. Brown's text, based on his doctoral thesis for the University of California at San Diego, is a bold and imaginative attempt to define, or redefine, once again what it is to do sociology. Now that its pretensions to scientificity have been discredited, its unselfconsciousness condemned as ideological, its claims for truth dismissed as pipe-dreams, we are left with a sociology which shares as much if not more with art than with science. Brown turns this apparent necessity into a virtue.

Sociology is, or should be, he argues, an aesthetic venture; its thinking exclusively metaphorical, its aim the construction of theories which are justified firmly in terms of economy, cogency and range. In the elision of art and science under the canopy of the symbolic, an elision which precludes any notion of a correspondence theory of truth, sociological thought becomes a matter of perspective in which the prime virtues are likely to be the capacity to generate irony, to unmask and to demystify, and in a manner reminiscent of Mannheim's relationism to enrich itself by the incorporation of more and more previously held but no longer entirely viable theories. Sociology is, or should be, a process of continual discovery and discovery at root is an aesthetic activity; its logic will be a poetic. Knowledge and beauty coincide. Order is its own reward. Brown's arguments are often persuasive, his vision is appealing, his range of reference extraordinarily wide, why then does the book as a whole keep missing a beat?

The comparison of art and science and the inclusion of sociology as some mediatory hybrid seems unexceptional; so too is the recognition of the inclusiveness of the symbolic as the realm of human action. But even though art and science are involved in a common discourse nevertheless they are still distinct, and it seems reasonable to suggest that rather than be a little bit of both sociology might well be neither of them. To reduce sociology to art and science, just as to reduce social action to drama, and Brown does both, is to fail to accept the challenge of defining and understanding autonomous and complex realities.

But a further thorny problem is raised. Brown offers a logic of discovery but not of demonstration. It is argued that for sociology the one is possible, the other not; an argument justified by reference to the multiplicity of anti-positivist and anti-empiricist epistemologies in vogue. If sociology is, must be, metaphoric then its relationship to the real world is, as it were, at one remove. A theory can neither be falsified nor verified, it can only be relatively full, relatively logical, relatively apposite.

We are led to the paradox of the refusal to provide criteria for correctness. A map, for example is a metaphor (Brown calls it an iconic metaphor), but the measure of its success is neither its elegance nor indeed its completeness but whether in using it we can find our way through country with which we are unfamiliar; in other words on its accuracy and faithfulness to an objective world. In so far as that world proves resistant to our attempts to theorize it then no characterization of those theories as *exclusively* metaphorical will do. Indeed, even Brown seems occasionally to acknowledge that this reality, despite the fact that we only know it through the symbols which we construct, intrudes into those symbolic constructions; both Park's cycle of race relations and games theory are seen to have failed in the face of the empirical.

The measure of Brown's success in all of this is that he has, in a particularly erudite way, raised again these central problems for sociology; the measure of his failure is that his solution to these problems is, in a manner of speaking, wrong.

Roger Silverstone

Moving in all directions

Contemporary Social Mobility
by C. J. Richardson
Frances Pinter, £8.00
ISBN 0 85397 015 8

The study of the experience of upward and downward social mobility in modern Britain as seen by those who undergo it, is based on responses to both a detailed questionnaire and an exploratory interview. Its most significant findings may be summarized as follows: education is a channel of mobility for very few people, though a large amount of "cross-class" mobility does take place, and in both directions. While education prepares and legitimates the children of existing high-status groups for the occupation of secure and unambiguous positions in the career hierarchy, a whole range of arbitrary and almost accidental devices moves large numbers of people in and out of the more ambivalent and uncertain sections of the middle classes.

Conversely, the downwardly mobile are rarely "skidders" but are predominantly either the sons of rather marginal middle-class categories, such as shopkeepers or farmers, or the sons of fathers who were themselves upwardly mobile into ambiguous jobs in which they never found satisfaction, and who therefore resolved that their children should enter a solid skilled working-class trade (which, by and large, they did, smoothly and contentedly).

The two main findings—the dubiousness of upward mobility and the tendency for the downwardly mobile to be the rather contented offspring of the upwardly mobile—thus come together, and this is brought out very well indeed in the book through interviews with men who feel uneasy about their own move into non-manual work and want their sons to avoid such problems by having a genuine trade. In the light of the role, or non-role, played in all this by formal education, the author draws some interesting, rather Illychian conclusions on the place of schools and on reforms which might be made, though it is strange that someone writing in the mid-1970s should entirely ignore the existence of comprehensive schools.

As an analysis of the experience of occupational change this book offers interesting and insightful material. Whether it can be treated as a study of class mobility is, however, more doubtful. The author makes uncritical use of the Registrar-General's scales in order to determine class allocation, a technique resting a move from a professional to a managerial occupation as always constituting downward mobility and, more important for the main theme of the book, regarding all moves from clerical to skilled manual jobs as unequivocally downward.

In discussing his frequent findings of clerical fathers wanting their sons to take up skilled manual work Richardson often wonders aloud whether in these circumstances such a move can really be considered to constitute downward mobility. This is a good question but one that should be asked at the beginning of a study before adopting such a crude index as the Registrar-General's scale. After all the work that Goldthorpe and Hope and others have done on occupational grading, studies of social mobility should really start from a more sophisticated base.

Colin Crouch

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BOOKS

On methodology

Philosophical Foundations of the Three Sociologies
by Ted Benton
Routledge & Kegan Paul, £6.50
ISBN 0 7100 8593 1

Benton's aim in this work is certainly ambitious, as his title implies. For to deal comprehensively with the classic confrontation between "positivist" and "humanist" methodologies of social science by reconstructing to their philosophical deep structures is to arrive at the point where a radical epistemology, hopefully transcendent of these two positions, becomes possible. Indeed this is the path Benton follows, for he develops a clearly argued presentation of the Marxian materialist epistemology (close to, but not identical with, the Althusserian analysis) out of his critique of the archetypal philosophies of social science.

Throughout the book Benton's main concern is to demonstrate the merit of applying philosophical modes of inquiry to the epistemological bases of social theory, but at the same time to argue for a particular view of the relationship between philosophy and science. Thus his emphasis on the long-term debate between positivistic and humanistic models of social theory is primarily directed to the ways in which each of these positions implies certain understandings of the link between social and natural sciences, and thus presuppose different rules for defining knowledge, for dividing science from non-science and ideology, for creating reliable explanations, and for setting acceptable methods. On the one hand the positivistic models, chiefly associated with the work of Comte and Durkheim, tend to emphasise the necessity for a unification of sociological and natural scientific methodology, where the "humanistic" models based in neo-Kantianism and expressed in the work of Weber and especially Peter Winch push instead towards a fundamental divide between natural and social sciences.

In tackling these issues at an avowedly philosophical level, and in isolating their specifically epistemological implications, Benton goes beyond most previous studies bearing on social science methodology. Yet it must be said that 200 odd pages is not much space in which to cover such a vast amount of sociological and philosophical ground. The book will require detailed prior acquaintance, not merely with the sociologists that it discusses, but also with at least the major representatives of the philosophical positions with which it engages. However, this should not be taken as a disadvantage—rather quite the opposite. It is in the careful and precise manner in which Benton interrogates the three philosophical positions, and more especially in his meticulous mapping-out of a materialist epistemology at the end of the book, that he offers so much to the sociology student.

If one criticism may be entered, it is that Benton devotes rather too much attention to historically distant representatives of the three philosophical traditions. Clearly the philosophical positions of Comte, Durkheim, Weber and Marx are necessarily subject to constant analysis and reanalysis: yet, despite the constant return of contemporary sociologists to the work of the founding fathers, it is possible to argue that the work of more recent sociologists at least deserves critical attention.

Systems theory and modern functionalism, together with the phenomenologically-oriented contributions of ethnomethodologists fall outside of both positivism and humanism, as Benton defines them, though he would no doubt argue that each is merely a variant form of one or other model. The great sophistication of sociological methods and techniques since the founding fathers, and the diversity of theoretical positions which now seem to be on offer, suggest a rather more complex picture of sociological philosophy than Benton cares to paint.

Nevertheless, in choosing to focus on those texts which raise "recognisable epistemological questions" in ways which make explicit the basic assumptions about scientific knowledge and explanation which lie within them, Benton does a valuable job. Whether we agree with his own philosophical position or not, the clarity and power of his analysis serve to create a book which ought to be required reading on any course in the philosophy of the social sciences.

Peter Hamilton

Responses to change

An Introduction to the Sociology of Rural Development
by Norman Long
Tavistock, £5.75 and £3.00
ISBN 0 422 74480 8 and 74490 5

Concentrating development resources on the poorest people in the poorest countries, a theme in current policies, entails increased attention to the people who live in rural areas of the Third World and to ways to improve their lot. For this reason alone Dr Long's book is timely.

Peasant mentality has often been seen as a major obstacle to development. Such a phrase is deeply fraught with meaning in the literature of the subject, and Long is rightly dismissive of much that has been written in this vein. He deals fairly with the controversy between the modernization approach and that which postulates structural dependency and the exploitation of satellites by their metropolis, criticizing both embattled schools of thought as too deterministic and not allowing for the diverse interplay of local and national forces. He is more sympathetic towards much of the new anthropology, with its actor-oriented approach and a close attention to decision-making, choice, and interactional processes.

Where I have emphasized the importance of the middleman or broker in articulating local and national politics, Long emphasizes too his economic role, and has much to say about individual enterprise and the extent to which people differ in their responses to change and their propensity to initiate it. In the discussion of planned social change, Long makes the conventional but still useful distinction between improvement strategies aiming to enhance production and incomes without fundamental social or legal change, and the transformation of the rural economy through the radical reorganization of land tenure, whether by redistribution or collectivization, and of methods of production. Here we may hope that the literature will soon be enriched by studies as yet unpublished of peasants after the revolution in communist countries.

While Long does not always give quite enough weight to international influences upon national policies—for example United States pressure on its client states to carry out land reforms—he keeps a clear vision of the interaction of local and national, and ends by echoing (perhaps unconsciously) Le Play and Geddes in urging a renewed attention to the region as a natural unit of study. With all its merits, though, it was perhaps inevitable that so compressed a summary of a substantial literature should be somewhat heavy and indigestible—like many a peasant diet.

J. E. Goldthorpe

Reviewers

Eileen Barker is lecturer in sociology at the London School of Economics;

David Berry author of Central Ideas in Sociology, is lecturer in sociology at University College, Cardiff;

John Rex is professor of sociology at the University of Warwick;

Keith Thurley, senior lecturer in industrial sociology at the London School of Economics, is author of The Supervisor and his Job.

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LETTERS TO THE EDITOR

'Marxist infiltration'

Sir,—While your editorial criticisms of Professor Gould's attack on "Marxist infiltration" are to be applauded, Mr David Walker's report itself needs correction on one major point (*THES* Sept. 23).

He refers to the Institute for the Study of Conflict as an "independent body" which is hardly the case. The ISC's main function is propagandist and it specialises in producing "counter-insurgency" literature aimed principally against so-called left-wing subversion. ISC is linked through several of its leading personnel (eg, Mr Robert Moss) to the National Association for Freedom which has been spearheading attacks on the trade unions.

Professor Gould's exercise should, therefore, be seen for what it is: namely, academic counter-insurgency, rather than the reasoned and impartial criticism it claims to be.

The tactics employed in his pamphlet — despite protestations that it is not McCarthyite—are precisely those of the cold warrior. Firstly, there is the smear. For instance *he labels* CAFD a "front organisation", for whom precisely? *If I sought to refute this allegation from my own experience, presumably* I would be deemed either a fellow-traveller or a dupe. So the mud sticks. Secondly, all the diverse individuals and groups mentioned are linked in guilt by association. Evidently the Communist Party stands behind it all, and manipulates our thoughts through its insidious cultural activities.

Counter-insurgents like Professor Gould, be they intellectual or military, tend to assume that ordinary people are stupid and the intelligensia gullible, and that both are manipulated by the dark forces of the left. For all its quotations and academic pretence, Professor Gould's pamphlet is just another exercise in crude conspiracy theory —incidentally, a mode of reasoning rightly denounced by his intellectual hero, Professor Popper.

PHILIP SCHLESINGER,
Executive committee member
Council for Academic Freedom and Democracy.

Sir,—The great difficulty of demonstrating the accuracy of Professor Julius Gould's arguments regarding the disproportionate Marxist influence in education, stems precisely from the fact that this is so largely a matter of personal day-to-day experience, rather than documentary or statistical evidence. I would certainly like to add my own testimony, and that of my close personal colleagues, in support of his views. We have experienced far too much dishonesty and indoctrination to dismiss his views with the apparent disdain of your editorial writer.

One does not expect academics to be political eunuchs. Indeed, one does not object to vigorous and passionate advocacy or criticism. But what one does expect is honesty in teaching, the treatment of one's political/intellectual opponents as worthy of dialogue and respect. But in my experience, what does not meet Marxist/Socialist canons is generally disposed of with contemptuous sneers, the humourous offhand dismissal, before proceeding to the really important concerns.

Worse than this sort of dismissal, however, is the practice of totally ignoring major schools of non-Marxist/Socialist thought. It might not be possible in economics, for example, to get away with not mentioning Milton Friedman—no matter how morally contemptuous a reach PhD level without ever hearing an account of the Austrian praxeological school (eg Hayek, Von Mises, Rothbard).

Likewise, I have personal knowledge of a sociology course at one modern university the whole of which was founded on unexamined Marxist presuppositions. No serious attempt was made at a scholarly comparison and analysis of competing ideas—the approach surely appropriate to a university education.

Throughout many disciplines major non-Marxist/Socialist scholars and schools of thought are denied serious consideration. If opponents of Marxism are to be mentioned it is usually those whose arguments are precisely the least effective or systematic! Thus Stephen Lukes can contribute to series on basic concepts in social theory a volume entitled *Individualism* which blatantly fails to deal with practically any of the major or systematic approaches of either historical or contemporary individualist thinkers.

Ironically, your own editorial only further underlines the intellectual arrogance of flabby socialism. We are thus confronted with the bankrupt terminology of the "left-right" political spectrum. Burkean Conservatives, classical Liberals, and radical individualists and libertarians are lumped together on "the right", presumably along with national socialists and fascists. The so-called left, the spectrum of socialism, "social democracy" and Marxism is, of course, categorized as the spectrum of "progressive opinion" —a fine piece of question begging! One might have presumed that it is precisely what constitutes "social progress" that scholarly endevour in our universities should attempt to discover.

That the "centre", which your writer so happily identifies as Crosland-style "social democracy" (a variant of socialism) might actually strike some as a reactionary, neo-mercantilist reversion disastrous for the prosperity and freedom of the bulk of the people, is apparently quite incomprehensible to him. Moreover, he even feels that bodies such as the allegedly "right-wing" Institute for the Study of Conflict, should not be taken "seriously". Might we ask why non-Marxist/Socialists should not receive the honour of participation in academic dialogue so readily granted their opponents?

Yours faithfully,
CHRIS R. TAME,
60 Hopton Road,
Streatham,
London, SW16.

Sir,—It was singularly instructive, having read Professor Gould's itemization of Marxist/radical tactics, to turn the page and find, in Dr Young's attack upon Professor Huxley's presidential address to the British Association, such a clear illustration of so many of these self-same tactics.

There one found the "tactic of generalization" in both its versions. In its positive version, Dr Young begins with the possibly valid insight that there is a relationship between the world-view of a particular social order and the form of science found therein, which he then progressively generalizes to the assertion that science is wholly political.

There is too, the negative version: Dr Young questions the hereditability of intelligence, implying the generalization that all studies of the biological bases of behaviour entail "biological fatalism". And, of course, the whole article is an exercise in the "all-or-none tactic" in which we are invited to choose between either a belief in the complete value neutrality and public unaccountability of science on the one hand, or a fully politicized science on the other.

Moreover, Dr Young shows us that Professor Gould's list of tactics is incomplete, for he adeptly employs that other favoured tactic of the left: contamination by association. In its first version, this consists of inserting perfectly legitimate scholarship within the context of a wholly different kind. Thus, Dr Young lists carcinogens, introgenesis, Thalidomide, Flixborough and Seveso, and several others, until the context is odious enough to insert sociobiology in an obvious attempt to besmirch this discipline.

In its second and, perhaps more serious version, the tactic involves citing certain objectionable views expressed by an individual, implying thereby that anyone capable of holding such views should be dismissed regarded as a scholar or a scientist. But science is not about individuals, it is about statements—propositions, theories and concepts.

The fact that Shockley has advocated eugenic measures, even if this is the motivation for his interest in the hereditability of intelligence, is immaterial; it is the statement that intelligence is inherited and the evidence cited in support of it which must be critically scrutinised, not its author.

You may be correct, Sir, when you say in your editorial on Professor Gould's allegations, that "the present virulency of the Marxists is a recognition of their insecurity in face of a liberal majority". But since scholarship necessarily rests on the communication of ideas, it is essential that we should all safeguard the medium of that communication from the pollution of those who seek to distort it for tactical advantage.

Yours faithfully,
P. A. J. WADDINGTON,
Department of Sociology,
University of Reading.

Sir,—I was interested to learn of "Academic valves (sic) undermined by Marxist offensive". Presumably the photograph beneath the headline was of one such valve in the person of Professor Julius Gould, a view given credence by the dictionary definition of same: "A device . . . to control the passage of air stream, water or the like acting automatically by yielding to pressure in one direction only". That direction is, needless to specify, from the right.

Yours faithfully,
MICHAEL WESTLAKE,
121 Lapwing Lane,
Didsbury,
Manchester.

When is a fact scientific?

Sir, Dr Robert Young discusses the distinction between fact and value judgment in science. How should we distinguish the two? Could it be that a fact is simply a value judgment on which the community is tallied and that a value judgment is a value judgment on which the community is divided? If so, we submit the validity of statistical methods as fact, and we imply that what may be fact for one community may not be fact for another, and that what is fact today may not be fact tomorrow.

Dr Young argues that within our own scientific community, and at the present time, we are asked to accept as fact that which is more properly classified as value judgment. I think he is correct (a value judgment). Like him, I think that people who ask us to make the switch are the ones who derive benefit from the switch. Is that a fact?

Well, let's try to be factual. Pragmatic, and take a real example. Before publication, a scientific paper is refereed. A referee is rational and honest. And that's a fact. Suppose then that I encounter a referee who seems to me (value judgment) to be irrational (if I assume him honest) or dishonest (if I assume him rational). How do I proceed from a value judgment to the facts of the matter? Only by improving the statistics.

I offer a real example. I have a paper on metal physics. It mentions Fermi surfaces. I sent it to a Cambridge journal. It was bounced, for reasons which (assuming a rational reviewer) seem to me quite dishonest. Accordingly, I told the editor of the journal that I should discuss the paper and criticize his referee's comments at a discussion meeting with professional colleagues, in London, on September 21. I invited the editor, and through him the referee, to participate.

"I really will come, if I can", he replied. He did not.

At the meeting, I read a prepared script. At the sentence, "I want to consider the referee's comments because I think they raise the question, who is being rational?" the Cavendish professor of physics, from Cambridge, a specialist in metal physics and Fermi surfaces (a fact) intervened (a fact). Discussion ensued, and the meeting broke down (value judgment) for lunch.

Was the sense of the meeting a fact? If it was, the subsequent ruling that the question, "who is being rational?" was inadmissible was a value judgment.

Why this strong objection, by one person, to improving the statistics? Why this strong antagonism towards establishing the facts of the matter? The answer to both questions is a value judgment—unless a large number of us reach the same conclusion. (Anyone who wishes to form his own value judgment may have the prime documents from me.)

Unlike Soviet dissidents, or genetic engineering, this example is very mundane, very humdrum. However, it does have a simplicity and a freedom from ambiguity which I think goes some way to supporting Dr Young's case.

Yours faithfully,
R. V. HESKETH,
Lower Stone, Berkeley, Glos.

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7
14
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Index 21